

**Experiences of E-Learning –
The Role and Influence of Tutors in a
Postgraduate Blended Learning Programme
in Clinical Education**

Catherine Anne Sherratt

**Thesis submitted in partial fulfilment of the
requirements of Edge Hill University, for the
award of Doctor of Philosophy**

June 2015

ABSTRACT

This Thesis presents Case Study research (Yin, 2009) into e-learning, in the situated context of a part-time postgraduate blended learning programme in clinical education [Postgraduate Certificate in Teaching and Learning in Clinical Practice]; and addresses a significant challenge for tutors: how to intervene in online discussions in order to achieve the highest quality of engagement by all participants.

Utilising a parallel convergent mixed methods approach (Teddle & Tashakkori, 2009; Creswell & Plano-Clark, 2011), this study offers insights into the perceptions and experiences of tutors and students regarding the role of the tutor within the online learning environment, and in particular, it explores the influence of the tutor on the development of true dialogue in an online discussion board, rather than a bulletin board of unconnected statements, or '*serial monologue*', which a number of authors have identified (Henri, 1991; Pawan et al, 2003; Garrison & Arbaugh, 2007). Thus, the project is essentially a praxis-driven exploration (Carr & Kemmis, 1986) of a complex and ill-defined aspect of teaching practice.

Data-collection was primarily by means of semi-structured interviews (Punch, 2009; Kvale, 2007), and by detailed analysis of the online Discussion Board archive (Garrison et al, 2000; Dawson et al, 2011; Sackville & Sherratt, 2006; Blignaut & Trollip, 2003a).

A theoretical model has emerged from analysis of study data (Sherratt, 2012), which classifies students' expectations of tutor intervention and support into four broad categories, represented graphically as quadrants of a square diagram. This model (along with its associated list of diagnostic indicators and tutor responses), offers a way of differentiating the highly divergent needs and expectations of students within the e-learning context, with regard to tutor input and support. Lessons for practice, both locally and elsewhere, arising out of this differential model, with its diagnostic indicators and suggested tutor responses, are explored and discussed.

KEYWORDS

Online learning; e-learning; blended learning; interaction; online discussion; asynchronous discussion; dialogue; facilitation; tutor role; Community of Inquiry.

ACKNOWLEDGEMENTS

First of all, I would like to extend my sincere gratitude to all of the study participants – students and tutors from the PGCTLCP programme. I have protected your identities, as promised, but you know who you are – thank you!

Secondly, I would like to thank my supervisory team for their support and guidance over this long and occasionally arduous journey: Andrew Sackville, long-time collaborator, mentor, role-model, and friend, Mark Schofield and Tony Liversidge, respected colleagues and friends, who walked the (sometimes stony!) path with me, with good grace and bad jokes. My thanks to you all for your stalwart support, insightful comments and enthusiasm for the study.

Thirdly, I am very grateful to Shane Dawson, Leah Macfadyen and colleagues from the 'Seeing Networks' project (University of Wollongong & University of British Columbia) for their generous support in transforming the SNAPP algorithm to work with my WebCT data.

I am also grateful to my many friends (in Greece, in Cyprus, and in UK), who have kept me going during my focused bouts of writing and the birth of each new chapter. Your interest and humour have made the task seem possible and even enjoyable.

And finally, last but by no means least, I would like to thank my husband, Peter Fox, for his tremendous support and encouragement over the years, both personal and academic. Thank you for being there, thank you for your patient critique and insightful feedback, and thank you for believing in me!

TABLE OF CONTENTS

	Page
LIST OF FIGURES	x
LIST OF TABLES	xii
CHAPTER 1: INTRODUCTION	1
1.1 Focus of Study	1
1.2 Context and Rationale	3
1.3 Overview of Case	6
1.4 Summary of Research Project	7
1.5 Overview of Thesis Structure	8
CHAPTER 2: LITERATURE REVIEW	11
2.1 Introduction	11
2.2 Theme 1: Community of Inquiry (CoI)	14
2.2a CoI: Social Presence	15
2.2b CoI: Teaching Presence	18
2.2c CoI: Cognitive Presence	21
2.2d Interactions of CoI 'Presences'	27
2.2e Modifications to the CoI Framework	30
2.2f Resonance with Other Taxonomies	39
2.3 Theme 2: Online Communities	42
2.3a Defining online communities	42
2.3b Impact and importance of online communities	47
2.3c The Formation of an Online Community	49
2.4 Theme 3: Online Discussion & Interaction	52
2.4a Quantity & Timing of Online Discussion	53
2.4b Structured discussion activities	54
2.4c Student roles: formal and informal	55
2.4d Levels and types of participation	56
2.4e Forced participation versus silent learning	58
2.5 Theme 4: Tutor Roles & Practice	60
2.5a Frequency of Intervention	60
2.5b Purpose of Tutor Activity/Intervention	63
2.5c Content of Intervention	70

TABLE OF CONTENTS

	Page
2.5d Scaffolding Intervention	73
2.5e Identifying Excellence in Online Practice	76
2.6 Summary	77
CHAPTER 3: METHODOLOGY	78
3.1 Introduction	78
3.2 Methodology as Philosophy	78
3.2a Underpinning Philosophy	79
3.2b Positionality, Epistemology & Conceptual Framework	80
3.3 Case Study Tradition	83
3.3a The Metaphor of the Lens	84
3.3b Types of Case Study	85
3.3c Establishing the 'Case'	86
3.3d Defining the Context of the Case	87
3.3e Situated Context of the Case	88
3.4 Mixed Methods	89
3.5 Influence of Other Research Traditions	91
3.6 Researcher – Participant Relationship	93
3.7 Methodology as Technique: Data Collection	94
3.7a Timing of interviews	94
3.7b Data Obtained from Study Participants: Interviews	94
3.7c Self-Administered Interviews: Questionnaire Format	97
3.7d Data Derived from the Online Discussion Board	100
3.8 Methodology as Technique: Data Analysis	100
3.8a Interview and Questionnaire Data	101
3.8b Discussion Board Analysis	103
3.8c Unit of Analysis	106
3.8d Social Network Analysis	106
3.9 Academic Dialogue	107
CHAPTER 4: ETHICAL CONSIDERATIONS	109
4.1 Introduction	109
4.2 Ethical Guidelines and Review	110
4.3 Voluntary Consent	111
4.4 Issues of Authority and Consent	112
4.5 Location of Interviews	114

TABLE OF CONTENTS

	Page
4.6 Inclusion of Discussion Board Data	115
4.7 Decision to Involve a Vulnerable Individual	115
4.8 Collegiality and Issues with Tutors	118
4.9 Impact on Validity and Reliability	120
4.10 Anonymity and Confidentiality	121
4.11 Issues of Authority and Influence on Data	122
4.12 Summary	124
CHAPTER 5: DISCUSSION BOARD ANALYSIS	125
5.1 Demographic data	125
5.1a Students	125
5.1b Tutors	126
5.2 Quantitative data	127
5.2a Learning Sets	127
5.2b Individual students: Peer facilitators	131
5.2c Tutor postings	133
5.3 Sackville & Sherratt Typology	136
5.3a Characterising group interactions	136
5.3b Impact of individual students	144
5.3c Type of tutor postings	150
5.4 Community of Inquiry Analysis	153
5.4a Analysis of Learning Set interactions	155
5.4b Explicit tutor disengagement & peer facilitators	163
5.5 Blignaut & Trollip Taxonomy	165
5.6 Social Network Analysis	170
5.7 Content analysis	176
5.7a Student views of the tutor role	176
5.7b Interaction and indicators of identity	180
5.8 Summary	184
CHAPTER 6: INTERVIEW DATA - STUDENTS	185
6.1 Interview Data	185
6.2 Thematic Analysis	186
6.3 Global Theme 1: Online Discussion	188
6.4 Organising Theme 1.1: Purpose/Function of Online Discussion	189
6.4a Basic Theme: Structure	189

TABLE OF CONTENTS

	Page
6.4b Basic Theme: Reflection	190
6.4c Basic Theme: Curriculum	191
6.4d Basic Theme: Personal Interaction / Group Bonding	192
6.4e Basic Theme: Debate	193
6.4f Basic Theme: Assessing Progress	194
6.4g Basic Theme: Lack of Purpose / Distraction	195
6.4h Basic Theme: Safe Place	195
6.4i Basic Theme: Sharing	196
6.5 Organising Theme 1.2: Students' experience of online discussion	197
6.5a Basic Theme: Disappointment	197
6.5b Basic Theme: Satisfaction & Enjoyment	199
6.6 Global Theme 2: Student Engagement	199
6.7 Organising Theme 2.1: Student Interaction	200
6.7a Basic Theme: Collaboration & Sense of Community	200
6.7b Basic Theme: Group Identity	202
6.7c Basic Theme: Face-to-Face Meeting & Building Rapport	204
6.7d Basic Theme: Peer Facilitation	205
6.7e Basic Theme: Notice Board	206
6.7f Basic Theme: Lack of interaction (Isolation & Frustration)	207
6.7g Basic Theme: Time & Timing of Postings	208
6.7h Basic Theme: Length of Postings	209
6.7i Basic Theme: Professional Groups	210
6.7j Basic Theme: Development	210
6.8 Organising Theme 2.2: Students' Experience of Change During the Course	211
6.8a Basic Theme: Confidence	211
6.8b Basic Theme: Learning	212
6.8c Basic Theme: Withdrawal	213
6.9 Global Theme 3: Tutor Engagement	213
6.10 Organising Theme 3.1: Tutor Presence	214
6.10a Basic Theme: Lack of Evidence of Presence	215
6.10b Basic Theme: Evidence of Presence	215
6.10c Basic Theme: Student Satisfaction	216
6.10d Basic Theme: Enthusiasm	217
6.10e Basic Theme: Power and Authority	218
6.10f Basic Theme: Peer Relationship	219

TABLE OF CONTENTS

	Page
6.11 Organising Theme 3.2: Facilitation Style	221
6.11a Basic Theme: Questioning, Inviting Discussion	221
6.11b Basic Theme: Summarising, Closing Down Discussion	221
6.11c Basic Theme: Postgraduate Level / Spoon-feeding	222
6.11d Basic Theme: Tutor Feedback/ Individual Interaction	223
6.12 Organising Theme, 3.3: Outcome of Tutor Intervention	223
6.12a Basic Theme: Impact of Tutor intervention	224
6.12b Basic Theme: Perceived Role of Tutor	225
6.13 Global Theme 4: Need for Tutor Intervention	226
6.14 Organising Theme 4.1: Seeking Active Tutor Intervention in Online Discussion	227
6.14a Basic Theme: Stimulating/Challenging	227
6.14b Basic Theme: Reassurance / Expertise	228
6.15 Organising Theme 4.2: Not Seeking Active Tutor Intervention in Online Discussion	229
6.15a Basic Theme: Interference	229
6.15b Basic Theme: Individual Contact / Support	230
6.16 Summary	231
CHAPTER 7: INTERVIEW DATA - TUTORS	232
7.1 Interview Data	232
7.2 Thematic Analysis	232
7.3 Global Theme 5: Tutors' Perspectives on Online Discussion	234
7.4 Organising Theme 5.1: Tutor Views of the Purpose/ Function of Online Discussion	235
7.4a Basic Theme: Collaboration	236
7.4b Basic Theme: Evidence of Engagement with the Course	236
7.4c Basic Theme: Reinforcement	237
7.4d Basic Theme: Means to an End / Tool	238
7.4e Basic Theme: Reflection	238
7.4f Basic Theme: Satisfaction	239
7.4g Basic Theme: Good Use of Online Discussion Board/ Activities	239
7.5 Global Theme 6: Tutors' Perspectives on Student Engagement	241
7.6 Organising Theme 6.1: Student Interaction	241
7.6a Basic Theme: Peer facilitation & engagement	242
7.6b Basic Theme: Lack of interaction / engagement	243

TABLE OF CONTENTS

	Page
7.6c Basic Theme: Professional Groups	244
7.6d Basic Theme: Group Cohesion	244
7.7 Global Theme 7: Tutors' Perspectives on Tutor Engagement	247
7.8 Organising Theme 7.1: Tutor Roles	248
7.8a Basic Theme: The range of roles and responsibilities of online tutors	248
7.8b Basic Theme: Comparison of the tutor role in online or face-to-face context	249
7.9 Organising Theme 7.2: Tutor Practice	250
7.9a Basic Theme: Presence	250
7.9b Basic Theme: Achieving Engagement	252
7.9c Basic Theme: Facilitation	252
7.9d Basic Theme: Timing	253
7.9e Basic Theme: Managing / Leading	254
7.9f Basic Theme: Experience and credibility	255
7.9g Basic Theme: Stretching / Knowledge construction	256
7.9h Basic Theme: Valuing/ Encouraging	257
7.9i Basic Theme: Correction/ Policing	257
7.9j Basic Theme: Feedback	258
7.9k Basic Theme: Tutor / Student relationships	259
7.9l Basic Theme: Tension - to intervene or not	260
7.9m Basic Theme: Impact of other course experiences	261
7.10 Global Theme 8: Tutors' Understanding of Students' Differing Needs for Tutor Intervention	262
7.11 Organising Theme 8.1: Seeking Active Tutor Intervention in Online Discussion	263
7.11a Basic Theme: Stimulating / Challenging	263
7.11b Basic Theme: Reassurance / Expertise	263
7.12 Organising Theme 8.2: Not Seeking Active Tutor Intervention in Online Discussion	264
7.12a Basic Theme: Interference	264
7.12b Basic Theme: Individual Contact / Support	265
7.13 Insight	265
7.14 Summary	266
CHAPTER 8: CONVERGENCE & THEORY GENERATION	268
8.1 Integration of Qualitative and Quantitative Student Data	268
8.2 Emerging Model of Students' Expressed Needs for Tutor Support & Intervention	270

TABLE OF CONTENTS

	Page
8.2a Quadrant A	271
8.2b Quadrant B	272
8.2c Quadrant C	273
8.2d Quadrant D	275
8.2e Comparison of Quadrant Model with Other Work	276
8.3 Dynamic Model - Snapshot in Time	278
8.4 Integration of Tutor Behaviour & Beliefs with the Emerging Theoretical Model	280
8.4a Profiling Tutor Behaviours	282
8.5 Individual and Group Profiles	283
8.6 Identifying profiles for individuals and groups	287
8.6a Indicators of location within the Quadrant Model	287
8.6b Distinguishing Between Quadrants A and B	288
8.6c Distinguishing between Quadrants C and D	288
8.6d Summary of indicative student behaviours	289
8.7 Suggested Tutor Interventions	291
8.7a Supporting Quadrant A	292
8.7b Supporting Quadrant B	293
8.7c Supporting Quadrant C	294
8.7d Supporting Quadrant D	295
8.7d Supporting communities	297
8.8 Summary	297
CHAPTER 9: IMPACT OF FINDINGS, GENERALISABILITY AND FUTURE WORK	298
9.1 Overview of Research Questions	298
9.2 Generalisability	300
9.3 Recommendations for Future Work	303
9.4 Conclusion	304
CHAPTER 10: REFERENCES	305
APPENDIX I: OUTLINE QUESTIONS AND PROMPTS TO SCAFFOLD STUDENT INTERVIEWS	337
APPENDIX II: OUTLINE QUESTIONS AND PROMPTS TO SCAFFOLD TUTOR INTERVIEWS	340

LIST OF FIGURES

	Page
Figure 2.1 CoI Framework (Garrison et al, 2000)	14
Figure 2.2 Practical Inquiry Model (Garrison et al, 2001)	22
Figure 2.3 Technological Presence in the CoI (Gregori et al, 2012)	34
Figure 2.4 Participation, interaction, social presence and collaboration in online peer review (Zhao et al, 2014)	35
Figure 2.5 Revised CoI Model (Shea & Bidjerano, 2010)	36
Figure 2.6 Tentative reconceptualization of CoI (Shea et al, 2014)	37
Figure 2.7 Augmented framework for online Community of Practice (Moule, 2006a, 2006b)	44
Figure 2.8 SSDL Model (Grow, 1991)	66
Figure 2.9 Five-stage model (Salmon, 2000)	74
Figure 2.10 e-Learning Ladder (Moule, 2007)	75
Figure 3.1 Questions to identify competing research paradigms, from Burton et al (2008: 61-2)	79
Figure 3.2 My Original Underpinning Conceptual Framework	81
Figure 3.3 Definition of an educational case study (Bassey, 1999:58)	83
Figure 3.4 Individual Elements and Strands of Research within this Mixed Methods Study	91
Figure 3.5 Thematic Network (Attride-Stirling, 2001)	101
Figure 3.6 Six steps of Thematic Network approach (Attride-Stirling, 2001)	102
Figure 3.7 CoI Framework (Garrison et al, 2000)	104
Figure 3.8 Typology of Online Responses (Sackville & Sherratt, 2006)	105
Figure 3.9 SNAPP Sociogram (Dawson et al, 2011), created using NetDraw (Borgatti, 2002)	107
Figure 5.1 Total number of student postings, throughout the year	128
Figure 5.2 Number of student postings, excluding 'General' discussion board	130
Figure 5.3 Typology of Online Responses (Sackville & Sherratt, 2006)	136
Figure 5.4 Types of posting, analysed using Typology of Online Responses (Sackville & Sherratt, 2006)	141
Figure 5.5a Individual student profiles, Learning Set A, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006)	145
Figure 5.5b Individual student profiles, Learning Set B, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006)	146

LIST OF FIGURES

	Page
Figure 5.5c Individual student profiles, Learning Set C, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006)	147
Figure 5.5d Individual student profiles, Learning Set D, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006)	148
Figure 5.6 Type of Tutor Postings, analysed using Typology of Online Responses (Sackville & Sherratt, 2006)	151
Figure 5.7 Community of Inquiry items (Garrison & Anderson, 2003)	154
Figure 5.8 CoI Analysis of Learning Set A (Garrison & Anderson, 2003)	156
Figure 5.9 CoI Analysis of Learning Set B (Garrison & Anderson, 2003)	157
Figure 5.10 CoI Analysis of Learning Set C (Garrison & Anderson, 2003)	158
Figure 5.11 CoI Analysis of Learning Set D (Garrison & Anderson, 2003)	159
Figure 5.12 Summary of items in Blignaut & Trollip Taxonomy (2003a, 2003b)	166
Figure 5.13 Tutor postings, analysed using Blignaut & Trollip Taxonomy (2003a, 2003b)	168
Figure 5.14 Sociograms of each Learning Set, Module 1	171
Figure 5.15 Sociograms of each Learning Set, Module 2	174
Figure 5.16 Sociograms of each Learning Set, Module 3	175
Figure 6.1 Thematic Network 1, Online Discussion	189
Figure 6.2 Thematic Network 2, Student Engagement	200
Figure 6.3 Thematic Network 3, Tutor Engagement	214
Figure 6.4 Thematic Network 4, Need for Tutor Intervention	227
Figure 7.1 Thematic Network 5, Tutors' Perspectives on Online Discussion	235
Figure 7.2 Thematic Network 6, Tutors' Perspectives on Student Engagement	241
Figure 7.3 Thematic Network 7, Tutors' Perspectives on Tutor Engagement	247
Figure 7.4 Thematic Network 8, Tutors' Understanding of Students' Differing Needs for Tutor Intervention	262
Figure 8.1 Graph showing Thematic Network 4 and Number of Postings	270
Figure 8.2 Model of students' expressed need for tutor intervention in online discussion (Sherratt, 2012)	270
Figure 8.3 Exemplar student discussion board profile, for Quadrant A	271
Figure 8.4 Exemplar student discussion board profile, for Quadrant B	273
Figure 8.5 Exemplar student discussion board profile, for Quadrant C	274
Figure 8.6 Exemplar student discussion board profile, for Quadrant D	276
Figure 8.7 Overlay of Tutor Themes with Model of Students' Expressed Needs for Tutor Support & Intervention	281
Figure 8.8 Implications of Quadrant Model for Tutor Practice	291

LIST OF TABLES

	Page
Table 2.1 Comparison of indicators of Expertise Presence (Lui et al, 2007) with indicators of Direct Instruction (Anderson et al, 2001)	31
Table 2.2 Comparison of elements of CoI and two alternative (tutor-focused) taxonomies	40
Table 4.1 Location of Student Interviews	114
Table 5.1 Gender of students in each Learning Set	126
Table 5.2 Profession of students in each Learning Set	126
Table 5.3 Number of Discussion Board postings for all Learning Sets, throughout the year	127
Table 5.4 Average number of Discussion Board postings, per capita	128
Table 5.5a Number of Discussion Board postings for all Learning Sets, excluding 'General' board	129
Table 5.5b Average number of Discussion Board postings, per capita (excluding 'General' board)	129
Table 5.6a Chi-Square for Goodness of Fit, Total Postings, Module 1	130
Table 5.6b Chi-Square for Goodness of Fit, Total Postings, Module 2	131
Table 5.6c Chi-Square for Goodness of Fit, Total Postings, Module 3	131
Table 5.7 Number of postings made by the most and least active members of each Learning Set	133
Table 5.8 Number of Discussion Board postings by tutors, throughout year	133
Table 5.9 Length of tutor postings (in words) throughout year	134
Table 5.10 Number of salutations, valedictions and vocatives in tutor postings, all year	135
Table 5.11a Analysis of Module 1 Discussion Board, using Typology of Online Responses (Sackville & Sherratt, 2006)	137
Table 5.11b Analysis of Module 2 Discussion Board, using Typology of Online Responses (Sackville & Sherratt, 2006)	137
Table 5.11c Analysis of Module 3 Discussion Board, using Typology of Online Responses (Sackville & Sherratt, 2006)	137
Table 5.12a Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Statement' in all modules	138
Table 5.12b Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Limited Response' in all modules	139
Table 5.12c Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Questioning Response' in all modules	139

LIST OF TABLES

	Page
Table 5.12d	Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Dialogue' in all modules 140
Table 5.12e	Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Other' in all modules 140
Table 5.13	Type of Tutor Postings, analysed using Typology of Online Responses (Sackville & Sherratt, 2006) 152
Table 5.14	Analysis of Learning Set A, using CoI (Garrison & Anderson, 2003) 156
Table 5.15	Analysis of Learning Set B, using CoI (Garrison & Anderson, 2003) 157
Table 5.16	Analysis of Learning Set C, using CoI (Garrison & Anderson, 2003) 158
Table 5.17	Analysis of Learning Set D, using CoI (Garrison & Anderson, 2003) 159
Table 5.18	Student contributions to 'Open Communication' and 'Cohesive' indicators 160
Table 5.19a	Chi-Square for Goodness of Fit, Cohesive indicators, all modules 161
Table 5.19b	Chi-Square for Goodness of Fit, Open Communication (OC), all modules 161
Table 5.20	Analysis of tutor postings using Blignaut & Trollip Taxonomy (2003a, 2003b) 167
Table 6.1	Profession of interview respondents in each Learning Set 186
Table 6.2	Thematic Network 1: Online Discussion Board 187
Table 6.3	Thematic Network 2: Student Engagement 187
Table 6.4	Thematic Network 3: Tutor Engagement 188
Table 6.5	Thematic Network 4: Students' Need for Tutor Intervention in Online Discussion 188
Table 6.6	Terms used by student interviewees to describe members of the Learning Set 203
Table 6.7	Terms used by student interviewees to describe tutors 220
Table 7.1	Thematic Network 5: Tutors' Perspectives of the Online Discussion Board 233
Table 7.2	Thematic Network 6: Tutors' Perspectives on Student Engagement 233
Table 7.3	Thematic Network 7: Tutors' Perspectives on Tutor Engagement 234
Table 7.4	Thematic Network 8: Tutors' Understanding of Students' Need for Tutor Intervention 234
Table 8.1	Thematic Network 4: Students' Need for Tutor Intervention in Online Discussion 269
Table 8.2	Thematic Network 8: Tutors' Understanding of Students' Need for Tutor Intervention 280
Table 8.3	Check-list for tutors: summary of indicative student behaviours 290

CHAPTER 1: INTRODUCTION

The research presented in this thesis examines the role and influence of the tutor in the context of e-learning, with particular consideration of online discussion as a major strategy to support and encourage student learning – a highly complex and as yet not fully understood area of educational practice.

1.1 Focus of Study

My work is centred on a case study of a blended learning programme for part-time postgraduate students in clinical education: the Postgraduate Certificate in Teaching & Learning in Clinical Practice.

I have been the Programme Leader for this course for a number of years, and I also teach on it, utilizing a ‘team-teach’ approach (Williams et al, 2010), with four other well-established faculty colleagues. When I originally conceived the idea for this study, it was with the aim of conducting practitioner research – *ie* I wanted to explore my own practice as an online tutor, and make improvements (Carr & Kemmis, 1986). There is still a strong element of this present within the study, and there will undoubtedly be personal and local lessons learnt. However, it has also led me to explore and compare the practice of other tutors as well as my own, making it overall a wider-ranging and more substantial piece of work. The opportunity to compare the impact of different tutors’ online interventions has importance within the overall objective of the study, and has allowed for additional lessons for practice to be drawn from this work, thus offering greater usefulness overall and potential generalisability.

Using conventional data collection techniques of semi-structured interview and questionnaire (Cohen, Manion & Morrison, 2007), I have explored the experiences, perceptions and expectations of both students and tutors; and this is then extended and further enhanced by analysis of the online discussion board, using a range of established taxonomies (Garrison et al, 2000; Dawson, 2008; Sackville & Sherratt, 2006; Blignaut & Trollip, 2003a).

It should be noted, first of all, that the idea and intention of ‘practitioner research’ sits at the very heart of this enquiry. The original over-arching objectives of this study were as follows:-

1. To examine the role and influence of tutors in the specific context of a postgraduate blended-learning programme in clinical education, with particular consideration of online discussion;
2. To explore students' experiences within this programme, with special consideration of the influence of tutors;
3. To consider the impact of the relationship between tutors and students within the e-learning context, with particular consideration of online discussion;
4. To identify ways in which tutors might enhance students' experience of e-learning, with particular consideration of online discussion;
5. To critically examine existing theory and evidence in relation to the role of tutors and their influence on learning, especially in blended and online programmes, and with particular consideration of online discussion; and to apply the findings of that research to this critical evaluation;
6. To draw conclusions that may have relevance to other e-learning and wider educational contexts.

It became apparent early on that the role and impact of the tutor in relation to the development of dialogue within the Discussion Board was closely linked to the development also of a sense of community. Therefore this study has also explored the extent to which a tutor might influence the development and maintenance of community.

The final set of research questions emerged and were refined as the study took shape, drawn from these objectives, and driven by the initial (and still vitally important) two fundamental questions, or challenges for my own practice as a tutor:

- a) *how I, as a practitioner, could extend my own practice into conscious, thoughtful praxis;*
and
- b) *how I, as an online tutor, might contribute to achieving rich dialogue in the online discussion board and enhance the learning experience of my students.*

These are the two fundamental questions that have underpinned this research study. In addition, arising out of the original objectives, a further and more detailed set of research questions and

sub-questions have been developed. These questions were designed to establish a detailed context for the study, and most especially, to broaden the study beyond my own practice, such that it can have more general relevance. These questions can be articulated as follows:-

1. What might be the role and influence of tutors, in the specific context of online discussion, in a postgraduate blended-learning programme?
 - 1a. How can students' experiences within this programme be characterised?
 - 1b. How does the interaction between tutors and students impact upon online discussion?
2. How might tutors enhance students' experience of online discussion?
 - 2a. To what extent, if at all, might a tutor support the development and maintenance of an online 'community' or sense of community?

1.2 Context and Rationale

In recent years, there has been a wide-spread acceptance of 'e-learning' as a viable and vibrant method of delivery and enhancement of education, offering teachers and learners the opportunity to go beyond the traditional face-to-face classroom environment. In particular, this has frequently involved the deployment of the discussion forum medium within the online context, which offers a means of communication and interaction between students and tutors, and the potential to generate rich dialogue. Indeed, some authors claim that the addition of online interaction into a learning experience offers clear transformative potential (Garrison & Kanuka, 2004) – thus, online discussion, the mainstay of online and blended learning, warrants serious consideration.

However, despite widespread reliance on 'online discussion', both in my own programme and within the education field as a whole, not only as a means of communication but also to support and enhance learning, the mechanisms involved in achieving a full and rich dialogue in a discussion board are not straight-forward, and are not, as yet, fully understood. Furthermore, there is still no clear consensus on how students' engagement can best be achieved or supported. For example, Garrison (2006) has proposed that students should take control of discussion, and McWilliam (2008) has suggested that the online teacher should cede control and become a collaborative co-constructor of knowledge; whereas Celentin (2007) believes that students can only reach higher cognitive levels and gain deep learning from online discussion with guidance

from a tutor. Thus, further clarification is needed, regarding the role and impact of the online tutor.

The development of online discussion and interaction is a major element of online learning, and this is therefore an area in which the experiences both of students and tutors have been particularly explored in my study. I have chosen to focus on a traditional VLE Discussion Board, since that is the main communication tool used within my chosen course. However, since it has been suggested elsewhere that similar interactions occur in 'social networking' (Ning or Facebook) when used in the educational context (De Schryver et al, 2009; Sherratt, 2011), this potentially offers an additional opportunity for generalisability that may extend beyond the VLE, as well as beyond my chosen course.

Much has been written giving advice to 'moderators' or 'facilitators' of online courses in terms of *'how to do it'* (for example, Salmon, 2000; Savery, 2005; Lewis & Allen, 2005; Palloff & Pratt, 2007; Baker, 2011; Motte, 2013). However, whilst many authors offer advice, there is something of a dearth of underpinning evidence. As Mazzolini and Maddison noted in 2003:-

"There is no shortage of anecdotal advice on how to conduct discussion forums in online education, but there appears to be very little research available so far to back that advice up."
(Mazzolini & Maddison, 2003a: 237)

I believe that the lack of empirical evidence still pertains today, a point which is supported by the views of Kirtman (2009), Arbaugh (2010) and Hexom and Menoher (2012); and so I would suggest that we still lack a sufficient research-base on which to found best practice. This view is well illustrated by Vlachopoulos (2009), when he opines:-

"Unfortunately, to date, the various papers, and the suggested frameworks and guide books for online tutoring offer limited practical understanding as to the ways and the practical complexities within which different members of staff adopt or are required to adopt one role or another in asynchronous learning environments."
(Vlachopoulos, 2009:50)

More recently, Arbaugh (2010) complained that much of the literature about online tutoring is drawn from anecdote, stating that there is a definite need for more robust and analytical evidence. An example of this would be Reingold and colleagues (2008) who suggested that the instructor's contribution is "vital", and that all modern teacher training programmes should include the concepts of online teaching within the curriculum, further proposing that:

“An appropriate instructor response can turn the course into a learning environment in which students would experience learning through reflective and metacognitive processes.”
(Reingold et al, 2008: 147)

However, as they did not explore what constitutes 'an appropriate instructor response', nor how or when it might best be deployed, the opportunity was lost to underpin and inform teaching practice. Meanwhile, Thomas (2013:199), following a review of the use of asynchronous discussion in health care education, concluded that *“research in this area appears to be in its infancy”*.

Some authors, notably Mazzolini and Maddison (2003a, 2007), have argued that tutors influence the engagement and interaction of students in an online discussion forum simply by the frequency with which they intervene in discussion. However, it is clear that the tutor role and impact must be far more complex than simply timing. For example, Anderson and colleagues (2001) have attempted to quantify *‘teaching presence’* as an element of their 'Community of Inquiry' (CoI) framework. This work has been very influential in developing my study, since part of the definition of 'teaching presence' relates closely to facilitative interventions in the online discussion forum environment.

An exploration of the different aspects of the CoI model is an important section of my review of the literature [Section 2.2] for two main reasons. The first is that the 'CoI' framework includes the concept of *‘teaching presence’* as an essential component of the ideal online learning experience, focussing on the tutor function; and secondly, the creation of a community is an express aim of the PGCTLCP programme. And since the need for community emerged at interview as a deeply-held belief of all of the programme tutors, the theories relating to community development and the concepts presented therein offer an additional 'lens' through which to view the findings. This said, the notion of *‘presence’* needs further unpacking, especially regarding the actions and indicators incorporated within each element of CoI 'presence', to ensure that all possible aspects of the online tutor function are properly and appropriately considered; and as I will demonstrate in Chapter 2, there are grounds for questioning whether all aspects of the CoI definition of *‘teaching presence’* are entirely appropriate or complete in their current form.

I will also consider whether the notion of *‘teaching presence’* necessarily fully captures all of the actions, role or impact of the online tutor, a view supported by other authors. For example, Diaz and colleagues (2010) believe that *‘pre-course activities’* (design and organization) need to be

considered separately from 'in-course activities' (direct instruction and facilitation), rather than combining them together as evidence of a single 'Teaching Presence' as presented in the CoI.

Furthermore, the effectiveness and comprehensiveness of the CoI framework has been questioned by a number of authors (Rourke & Kanuka, 2009; Vlachopoulos & Cowan, 2010b; Bleazby, 2012), and this therefore warrants further investigation – for example, Rourke and Kanuka (2009) state:

“We encourage researchers to conduct more, substantial investigations into the central construct of the popular framework for e-learning and theorists to respond to the mounting body of disconfirming evidence”. (Rourke & Kanuka, 2009:19)

Even amongst the supporters of CoI, there is ongoing debate regarding the completeness of its elements and indicators [discussed in detail in Chapter 2] – for example, Campbell and Cleveland-Innes have suggested that 'emotional presence' should be considered as a potential fourth and separate element of the framework, noting its impact on teaching presence as well as in the cognitive domain (Campbell & Cleveland-Innes, 2005; Cleveland-Innes & Campbell, 2012); whereas Shea and Bidjerano (2010; 2012) have proposed that a fourth dimension of the CoI framework should be 'learning presence'.

Thus, it appears that opinion is very much divided, with the CoI offering some valuable insights, but by no means a complete answer. And so I would argue that there is a distinct need for further research into the impact of the tutor as a person, what exactly the tutor does, and of the relationship that the students have with the tutor and with each other. Furthermore, the expectations that students and tutors have with regard to the role of the online tutor are not widely explored; nor is the influence of what the tutors actually say in their interactions with students and how their online interventions are phrased. And yet these are additional subtleties which might further influence the development of online discussion, and the overall experience of e-learning.

The development of different online styles and ways of responding in an online discussion forum (and in particular, the impact of individual student behaviours) are topics that I had already started to explore before undertaking the current study (eg: Sherratt & Sackville, 2006a; 2006b; 2006c). This background context is expanded and further explained in Chapter 3 [see especially, Figure 3.2]. Thus, it can be seen that my current work leads from and broadens my own earlier experience, in line with Yin's (2003) recommendations that case study researchers should build on their pre-existing expertise.

1.3 Overview of Case

For this research, the chosen 'case' was a single cohort of the Postgraduate Certificate in Teaching and Learning in Clinical Practice (PGCTLCP). This programme consisted of three modules, of equal length, studied sequentially during the year, on a part-time basis. The course was delivered by means of 'blended' learning – *ie*: the online study was supplemented by a total of five one-day face-to-face workshops during the year.

The cohort worked together in the five face-to-face sessions during the year, but was divided for online work into four small 'Learning Sets' (of around 8 students), with the membership of each set specified in advance by tutors, and balanced so that they contained an equal ratio of males and females, and the spread of different professions was also largely the same in each group. By carefully structuring the Learning Sets in this way, it was intended that participants in each learning set could gain an equitable learning experience.

Tutors adopted a 'team-teach' approach during the face-to-face workshops, but each Learning Set was assigned a specific academic tutor to work with them online for each module, moving to a different tutor for subsequent modules.

The online environment used for this course was the WebCT Virtual Learning Environment (VLE), and online interaction was primarily by means of threaded asynchronous discussion within the VLE. Each Discussion Forum was moderated by the relevant Learning Set tutor. Tutors contributed to the ensuing group dialogue, usually infrequently, but according to their own professional judgement – *ie*: there was no set pattern or timing for tutor postings within these discussions. Pre-defined discussion topics ensured that all Learning Sets covered the same basic curriculum, but additional discussions could be created by any member of the group, according to individual interests and experience. Please note that the 'Case' will be explored in more detail in Chapter 3.

1.4 Summary of Research Project

The project considers a single situated case study, in an attempt to control for as many variables as possible, and to work therefore with as cohesive and consistent a group as possible. The project brings together students' expressions of their need for tutor support, their expectations of tutors, and their actions; along with tutors' expressed values, beliefs and expectations, and their actions.

The project overall is an attempt to identify what results ensue from different actions on the part of the tutor, what actions and support might be most appropriate to offer to online students, and (by means of a structured model of students' support needs) to generate a potential mechanism for deciding on differential levels of support. The results are specific to one postgraduate course, but offer significant opportunities for fuzzy generalisations (Bassey, 2001a; 2001b) to be drawn across other courses and sectors. The generalisability and wider applicability of emerging findings have already been explored in part, by means of conference presentations and journal publication throughout the project. This, along with opportunities for further and wider generalisations, and the potential to transfer to other courses are explored within this Thesis [see especially, Chapter 9]. In addition, a 'Best Estimate of Truthfulness' (Bassey 2001b) is offered, to further assist the reader in assessing the applicability and generalisability of my work to other contexts.

1.5 Overview of Thesis Structure

In this Introductory chapter, I have set my work in context, and presented the rationale and objectives of the study. I have also articulated the research questions that I have set out to answer, and provided an overview of the PGCTLCP programme (the focus, or 'case' of the study). The remainder of the Thesis will be structured as follows:-

Chapter 2: Review of Existing Literature & Theory

This chapter further contextualises and identifies the influences on my thinking, locating my study in the wider academic field. The literature is considered under a series of four themes, and, as noted above, particular consideration is given to the development and underpinning theory relating to the Community of Inquiry framework (Garrison, Anderson & Archer, 2000).

Chapter 3: Methodology

This chapter explores my personal philosophical stance and underpinning values; and I discuss the detailed methodological considerations and justification of the choices I have made; and offer an explanation of the individual methods I have adopted. Thus, I explain why the study should be considered a 'Case Study', and justify the particular choice of the sub-type of 'theory-generating case study' (Bassey, 1999). This chapter then explores the multiple methods of data-collection used (*ie*, why I have analysed discussion boards using a variety of tools and taxonomies; and why I have undertaken interviews with both students and tutors). It examines what 'case study' research is, and how I am defining it in this particular context, with reference

to theoretical literature and appropriate debates. Thus, this chapter also identifies the need to describe the case fully, using multiple lenses or viewpoints, before de-constructing it in order to generate new theory.

Chapter 4: Ethical Considerations

The issues of authority, consent, collegiality, the rights of participants, and my own underpinning beliefs and values all impact on Methodology. However, these considerations are sufficiently large and complex to warrant a separate chapter in their own right, rather than attempting to subsume them into other chapters. Issues impacting on the validity and reliability of the study data are also addressed here.

Chapters 5 – 7 present different elements of the overall data from the study:-

Chapter 5: Discussion Board Analysis (VLE)

This chapter explores the Discussion Board archive of the course which forms my 'case', first of all presenting some descriptive statistics (quantitative analysis of discussion postings), followed by an analysis of the discussion board archive, using a variety of taxonomies and tools, including the Community of Inquiry (Garrison et al, 2000), the Blignaut and Trollip Taxonomy of Instructor Participation (2003a), the Sackville and Sherratt Typology of Online Responses (2006), and Social Network Analysis (Dawson, 2008; Dawson et al, 2011). This analysis gives a unique insight into interactions with the course, as captured within the WebCT archive, and this is supplemented by content analysis of actual postings.

Chapter 6: Student Interview Data

This chapter presents a detailed analysis of the 24 student interviews and questionnaires, using 'thematic network' categorisations (Attride-Stirling, 2001), along with a summary of students' perceptions of the tutor role, and their experiences of online discussion.

Chapter 7: Tutor Interview Data

This chapter presents data from the Tutor interviews, again including analysis and thematic network categorisations (Attride-Stirling, op.cit.). Tutor perceptions of their role and practice are presented and discussed, with comparisons made to the student views which were presented in the previous chapter.

Chapter 8: Convergence & Theory Generation

This chapter offers a summary of emerging theory arising out of this study. In accordance with the convergent 'mixed methods' research design (Creswell & Plano-Clark, 2007; Teddlie & Tashakkori, 2009), the two strands of data [qualitative and quantitative] are integrated together, to tell the full story of the case, and to generate theory. The emerging Model of Expressed Need for Tutor Support (Sherratt, 2012), is also presented and discussed here, with consideration of both students' and tutors' perspectives. A practical check-list of student behaviours indicative of each location within the Quadrant Model is then proffered, and implications for tutor practice are discussed.

Chapter 9: Impact of Findings, Generalisability and Future Work

This chapter considers the external validity of the study, in terms of opportunities for generalisation of the findings, including the possibilities for “Fuzzy Generalisation” and “Best Estimate of Truthfulness” (Bassey, 1999, 2001a, 2001b). The lessons learnt from this study and implications for practice (both individual and general) are then considered, in the light of the likely generalisability of these results, including recommendations for further work.

Chapter 10: References

Many of the sources cited in this work are pertinent to more than one chapter. Therefore, to avoid repetition, all references are listed once, alphabetically, at the end of this Thesis, rather than being presented on a chapter-by-chapter basis.

The literature is reviewed and discussed in detail in the next chapter.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of extant literature relevant to this field, and explores in detail the work that has been especially influential on this study. This review demonstrates that although the field has been much researched, there remains a lack of consensus and no clear understanding of the mechanisms at work during successful online interaction for learning, nor of the impact that different tutor actions and roles may have on student discussions.

Reviewing the literature for this study has been complex, due to the multiplicity of search terms and the extremely buoyant nature of the field, with the constant production of new scholarly works. Thus, it has remained an ongoing task throughout the project, until 15th November 2014.

In carrying out this structured literature search, a plethora of possible key words have been identified, which change over time, and with the geographic location of the authors. Thus care both in formulating the search terms and in subsequent interpretation of published findings is needed. For example, in the USA and Canada, a whole award is known as a 'programme', which consists of a number of 'courses' each usually lasting one semester. Thus, in the US a course is a small part of a year's study, which is broken down further into 'modules' – a smaller unit of study, lasting only 2-3 weeks. In the UK, however, it is common to refer to a whole award as a 'course' (the American 'programme'); which is comprised of 'modules' each lasting for around a semester (the American 'course'), and a series of 'blocks' or 'units' of study, equating to the American 'module'. Whilst this potential confusion over the length of study does not impact on individual searches, it is highly pertinent, if not essential, to our understanding of the size, scope and overall importance of published literature.

The breadth of available search terms can be summarised as follows:- firstly, the type of course delivery might be variously known as e-learning, online learning, blended learning, supported online learning, technology-enhanced learning (TEL), virtual learning, electronic learning, networked learning (often asynchronous networked learning, or ALN), online teaching, computer-mediated conferencing (CMC), computer-mediated *communication* (CMC), computer assisted instruction, computer assisted learning (CAL), computer-supported learning, web-based learning or blended learning. This list may not be entirely exhaustive, since further terms

continue to creep into common parlance, such as the newer American term “*hybrid course*”, which was added to my search in 2010.

Similarly, discussion activity might also be described as a bulletin-board, discussion board, discussion forum, online forum, computer conferencing, CMC, web-mediated discussion, threaded discussion, electronic discussion, asynchronous discussion, or it can even be described simply as online interaction or online collaboration, online cooperation, web-based interaction, or an online Community of Inquiry.

Finally, the role that I have referred to as a ‘tutor’ might be variously described as tutor, teacher, facilitator, mediator, moderator, instructor, (all with a possible ‘e’ in front of this title), teaching assistant, faculty, lecturer, professor or course director.

This lack of consistency within the literature was noted by Tallent-Runnels and colleagues as early as 2006. Disappointingly, however, their call for standardisation of terminology does not seem to have been widely actioned, leading to the same problem being noted more recently by Moore and colleagues (2011).

In the face of such complexity, a systematic search strategy, combining these myriad different search terms was deployed. The first of these sets of key words, when run as a search in the Education Research Complete database, yielded 50,876 English language, peer-reviewed items. The second set of key-words, run as a separate search, yielded another 17,791 items. While unsurprisingly the final set of key words (focused simply on aspects of teaching or facilitating), run as a stand-alone search yielded 348,727 items. When run as a ‘*nested*’ search, however, combining the three sets of alternative key words, the yield was considerably more manageable, although still an impressive 2,250 English language, peer reviewed items.

Thus, it can be seen that this compound searching strategy has yielded excellent and extensive results. However, the sheer size of this corpus of scholarly work has brought with it an additional need for systematic criteria for inclusion within this Literature Review. Papers which focus on specific technologies, rather than on teaching and learning, will therefore not be discussed in this chapter; neither will papers which have a primary focus on school-age children rather than adult learners; nor those which focus on institutional policy and the introduction of online teaching as a delivery mechanism, whether in universities or elsewhere; and nor will studies of online communities which exist outside of a formal educational programme.

However, it should be noted that papers which focus on undergraduate courses, as well as postgraduate programmes are included herein.

This has resulted in a body of around 300 scholarly articles which have been deemed relevant for consideration in this review. Therefore, I have grouped papers according to broad themes, to add clarity and structure to such a large body of literature. However, it should be borne in mind that the themes are, of necessity, somewhat overlapping, and many papers correspond to more than one major theme grouping, due to the situated context of such research, and the fact that the organising themes are ones generated by myself and not necessarily by the original authors.

In particular, it should be noted that a substantial sub-section of papers focused on online communities (at least 65 to date) relate to the 'Community of Inquiry' (CoI) framework developed by Garrison, Anderson and colleagues over more than a ten-year period (see, for example, Garrison et al, 2000; Anderson et al, 2001; Garrison, Anderson & Archer, 2010; Garrison, 2011a). Although these papers could correspond with the overarching theme of '*Online Community*', I would propose instead that this area of work is substantial and cohesive enough to warrant a separate section. Indeed, I am not alone in this view, with the journal '*Internet and Higher Education*' publishing a special double edition in 2010 (Volume 13, Issue 1-2), devoted entirely to CoI, acknowledging and celebrating the tenth anniversary of the CoI Framework. Four years later, in another special edition on CoI (in the journal '*e-Learning and Digital Media*'), Remesal and Freisen (2014:1) further commented that "*The Community of Inquiry framework, originally developed to describe learning activity in threaded online discussion forms, has had a relatively long and illustrious history*". Thus, there is a clear rationale for identifying the CoI as substantial enough to warrant a separate theme in its own right, within the extant literature.

Therefore, the four themes I have identified as relevant for this review are:

- 1. Community of Inquiry;**
- 2. Online Communities;**
- 3. Online Discussion & Interaction;**
- 4. Tutor Roles & Practice.**

I shall now offer a detailed discussion of the most salient and influential points arising out of this body of literature.

2.2 Theme 1: Community of Inquiry (CoI)

The Community of Inquiry (CoI) model (Garrison et al, 2000; Garrison & Anderson, 2003; Garrison, 2011a) is a conceptual framework for online learning experiences, that “*identifies the elements that are crucial prerequisites for a successful higher educational experience*” (Garrison et al, 2000: 87). It consists of three overlapping elements of 'presence' ideally to be found in online courses, derived especially from analysis of individual contributions to discussion threads in online courses. These essential elements are defined as:- 'teaching presence', 'cognitive presence' and 'social presence' [see Figure 2.1, below].

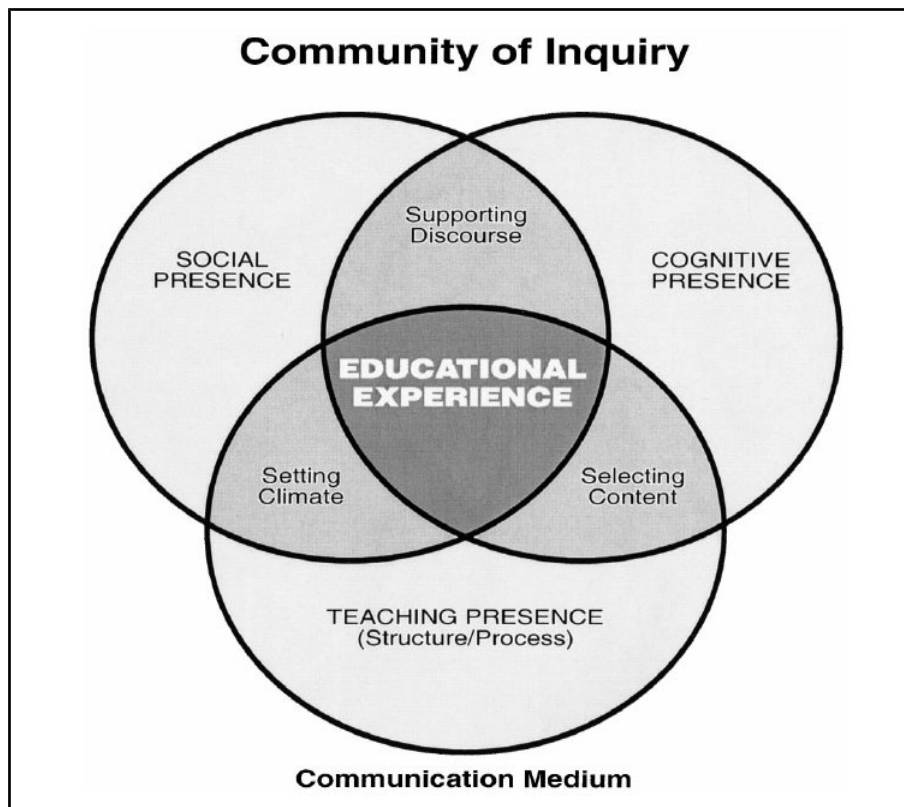


Figure 2. 1: CoI Framework (Garrison et al, 2000), reproduced with permission.

It can be seen from Figure 2.1, that the authors chose to utilise a 3-cell Venn diagram, to represent the different elements of activity involved in online learning, and to show their inter-dependency and inter-reactions. It is of interest, and of especial significance to my research project, that the underpinning research for building the CoI model was situated in the Higher Education context, and specifically in a graduate-level programme.

Each of the three elements of 'presence' has, to a large extent, been discussed separately in published literature - leading to complaints that much of the published CoI work is fragmented, with little work (other than some published by the original authors of the CoI) considering the implications of the framework as a whole (Arbaugh, 2007; Shea et al, 2010a).

Initially, templates of indicators were devised for each element of 'presence' in the Framework, for use with transcripts of online courses, most especially the discussion forum (Garrison et al, 2000, 2001; Rourke et al, 1999; Anderson et al, 2001; Garrison & Anderson, 2003). However these were later supplemented by a student questionnaire, which identified the same variables as the templates (Arbaugh et al, 2008), offering instructors an additional means of identifying the existence of CoI 'presences' within any given course.

2.2a CoI: Social Presence

Social Presence was introduced as an element of the CoI Framework in the original, seminal paper by Garrison and colleagues (2000), where it was presented not as an end in its own right, but as a necessary precursor and supplement to the higher value of cognitive presence (used to represent evidence of deep learning). Social Presence was defined merely as:

“the ability of participants in the Community of Inquiry to project their personal characteristics into the community, thereby presenting themselves to the other participants as 'real people.'”
(Garrison et al, 2000:89)

However, in the follow-up paper, which explored Social Presence in greater detail, Rourke and colleagues (1999:52), refined the definition to become *“the ability of learners to project themselves socially and emotionally in a community of inquiry”*; and the categories of activity that comprise Social Presence were defined as Affective Responses; Interactive Responses; and Cohesive Responses - as compared to the original description of *“emotional expression, open communication, and group cohesion”* (Garrison et al, 2000: 99). Clearly, the paper by Rourke and colleagues (1999) is something of an anomaly, since it discusses and expands upon the model presented by Garrison and colleagues (2000), yet it is attributed by the publishers to the previous year. It is of note that in this paper, Rourke and colleagues (1999) presented original research, in the form of analysis of transcripts from two graduate-level courses, that underpin the development of an analytical template for identifying social presence in online discussions.

Social Presence might also be considered as the most intuitively understood of the 'presences', since in essence it offers the view that a community requires the presence of people. Furthermore, Rourke and colleagues (1999:67) also proposed “*that fairly high levels of social presence are necessary to support the development of deep and meaningful learning*”, which may seem, at first, to claim a higher significance for Social Presence than that which was originally anticipated (Garrison et al, 2000). However, Rourke and colleagues (1999:67) also posited the idea that too much Social Presence could have the potential to be 'detrimental' to learning, arguing that “*Discourse in a community of inquiry is not equivalent to social interaction over the garden fence or the bar at a neighborhood pub*”. Furthermore, they suggested that for learning to occur, interaction must go beyond the merely social - confirming the need to reach a higher cognitive state, as proposed from the start by Garrison and colleagues (2000), and later elaborated by Garrison and Cleveland-Innes (2005), and Zhao and colleagues (2014). This may also explain the recent finding of Abedin and colleagues (2014) that non-task social interactions are most frequent in the first few weeks of a course.

However, somewhat disappointingly, Rourke and colleagues (1999) did not identify what might count as 'sufficient' or 'too much' social presence; neither did they account for why it might become 'detrimental' to learning rather than merely not directly contributing to its attainment. The relative balance between the different elements of the CoI will be considered in more detail later in this chapter [Section 2.2d].

Swan (2002a) further expanded our understanding of Social Presence, highlighting in particular the need for interaction. A further refinement of this was offered by Swan (2003a), describing a proposition originally posited in a joint conference paper (Danchack, Walther & Swan, 2001), when she expounded the notion of an '*Equilibrium Model*' for the development of Social Presence. This further supported the original constituent parts of Social Presence, identified by Rourke and colleagues (1999), since it was proposed that when one form of 'immediacy behaviour' was less in evidence, another naturally increased to compensate. Immediacy behaviours can be defined as a variety of informal non-verbal and verbal actions to show affect and establish closeness to others (Gorham, 1988; Melrose and Bergeron, 2007). Thus, in the 'Equilibrium Model', Swan (2003a) proposed that when Affective Indicators were less apparent, verbal immediacy behaviours (equating to Cohesive Indicators) were used to maintain the overall Social Presence equilibrium.

It therefore becomes apparent that in order to create a community, it is essential that the individual participants must be willing and prepared to communicate with each other. I concur with this proposition, and have discussed in detail elsewhere the relationship between interaction and community (Sherratt, 2009a). Furthermore, this also supports the finding of Richardson and Swan (2003:78) that “*students perceive the presence of others in their learning experience as an essential part of it*”.

Swan (2004a) then expanded her exploration of interaction in relation to the CoI notion of 'presences', redefining Social Presence as 'interaction with peers' (whilst Teaching Presence becomes 'interaction with instructors' and Cognitive Presence 'interaction with content'). No original research was presented in this monograph, which merely offered a summary of existing research findings. But it is nevertheless interesting that Swan chose to attach Anderson's (2003) work on interaction (which also identified the three areas of interaction with peers, instructors and content) to each of the CoI presences, offering a modification to the original CoI model (Swan, 2004a:1). However, by so doing, Swan seemingly contradicts the underpinning values of the CoI Framework (Garrison et al, 2000; Garrison & Anderson, 2003; Garrison, 2011a), which categorises according to actions and their impact, rather than according to the actors involved - so, for example, students, as well as their instructors, can exhibit 'teaching presence' behaviours (Shea et al, 2003).

However, the following year, Swan and Shih (2005) offered a further alternative conceptualisation of Social Presence, as being a composite of social interaction with peers and separately, social interaction with instructors. Furthermore, both of these constructs of Social Presence were found to be significant aspects of an online learning experience. In this proposition, they reaffirm the position of Rourke and colleagues (1999), who included 'Teacher Immediacy' as an original element within their construct of Social Presence, drawing on the earlier work of Gorham (1988) and Gorham and Zakahi (1990) on the impact of immediacy behaviours in supporting learning. Interestingly, Arbaugh (2005) also found a strong degree of correlation between interaction and perceived learning.

Swan and Shih (2005) also noted that higher instructor contact and Social Presence could make up for lower levels of Social Presence on the part of fellow students, thus further confirming the notion of 'equilibrium' in Social Presence, posited earlier (Swan, 2003a). However, this contrasts with work by Shea and colleagues (2010a), who found a significant correlation between instructor Social Presence and student Social Presence.

Meanwhile, the need for students to learn to be online learners and to present themselves in the online context was posited by Garrison and colleagues (2004):

“Social presence encompasses the ability of participants to coalesce for a common purpose. Considering the asynchronous virtual community in which students interact, this may demand a significant role adjustment”. (Garrison et al, 2004:63)

This additional insight, further supported by the work of Arbaugh (2004) and Robinson (2009), indicates that Social Presence cannot automatically be assumed to exist in an online course. This, then, has significant implications for the formation of community and thus also for the actions required of the course designer and tutor. This will be further explored later in this chapter [Sections 2.3 and 2.5].

More recently, Garrison (2011a) has offered a further refinement to the definition of Social Presence, as:

“the ability of participants to identify with the group or course of study, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by way of projecting their individual personalities” (Garrison, 2011a: 34)

This revision further highlights the developmental nature of Social Presence over time, as well as establishing its essential nature for collaborative learning to occur.

2.2b CoI: Teaching Presence

The concept of Teaching Presence was also introduced as an original element of the CoI Framework (Garrison et al, 2000). It was then explored more fully by Anderson and colleagues (2001) who presented a tool for identifying Teaching Presence in transcripts of online courses. This work was based on graduate-level online courses, in both health and education, offering an additional element of resonance to my own research. The constituent parts of Teaching Presence were defined by Anderson and colleagues (2001) as 'design and organization'; 'facilitating discourse'; and 'direct instruction'.

Research by Garrison and Cleveland-Innes (2005), and by Garrison, Cleveland-Innes and Fung (2010) has suggested that Teaching Presence is the crucial underpinning element for achieving Cognitive Presence and deep student learning. This supports the original definition offered by Anderson and colleagues (2001:5) that Teaching Presence is *“the design, facilitation, and*

CHAPTER 2: LITERATURE REVIEW

direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes.” It is especially noteworthy that this definition, right from the start, makes the clear assumption that Teaching Presence (and, indeed, the teacher) will manipulate the other two 'presences' in order to achieve deep learning. And yet Garrison and Cleveland-Innes (2005) stated explicitly that this Teaching Presence does not have to come from instructors, but can be provided by fellow students. This proposition bears out the earlier findings of Rourke and Anderson (2002) which indicated that students are capable of taking on the role of facilitator. Moreover, they now cautioned against too heavy reliance on the instructor:

“Ultimately, the concern is that instructor-led discussions can easily revert to the recitation structure, or initiate-respond-evaluate structure, of a traditional lecture in which the student is often a passive and unreflective audience member”

(Rourke & Anderson, 2002:4)

More recent work by Shea and colleagues (2010a) reinforces the view that Teaching Presence does not necessarily require the presence of the instructor, even questioning the need for the instructor's presence at all:

“Results suggest that students' teaching presence may have a “floor” threshold level and when the instructor's teaching presence drops to zero students attempt to recreate “instructional equilibrium”.”

(Shea et al, 2010a: 14)

This proposition, then, has great significance when we come to consider what is the role and impact of the tutor within the online learning environment. Whilst it does not, in itself, answer the research questions underpinning this study, regarding what the tutor might do to ensure that online discussion flourishes, it is nevertheless supported by my own research (Sherratt, 2010). Thus, I will return to further consider this point and its resonance to my findings during the analysis of my own data [Section 5.4b].

Meanwhile, both Zydney and colleagues (2012) and also Weerasinghe and colleagues (2012a) have moved further still, and explored how learning activities can be designed so as not to need the input of a tutor facilitator, with students being supported to take on this role instead, providing the requisite Teaching Presence. This contrasts with Baran and Correia (2009) working with a cohort of trainee teachers, who recommended that students should be encouraged to take the role of facilitator, whilst in turn, instructors should remain as part of the group, acting as participants. This proposition has some resonance with the findings of my own research, so I will return to discuss it further in Chapters 5-8.

CHAPTER 2: LITERATURE REVIEW

However, it is not confirmed which constituent categories make up Teaching Presence, as there have been a number of challenges by other authors - for example, Arbaugh (2007), whose analysis of the perceptions of 667 American MBA students led him to acknowledge “*at least the possibility that course design and organization is a distinct construct from teaching presence*” (Arbaugh, 2007:79-80). This, coupled with their own analysis, led Díaz and colleagues (2010) to comment on the need to distinguish between 'pre-course' and 'in-course' activities on the part of the instructor.

I agree, but would suggest that neither Arbaugh (2007) nor Díaz and colleagues (2010) go far enough. To me, their work suggests a potential problem with the way that the Teaching Presence element of CoI was originally constructed. Whilst I agree that there is a subtle difference between Teaching Presence and Teacher Presence, nevertheless, it is somewhat frustrating for tutors, such as myself, to see that the combination of items within the single construct of 'Teaching Presence' (Anderson et al, 2001) make the implications for practice unclear, as an identified need for Teaching Presence could imply a requirement for active facilitation or direct instruction, or else could simply confirm the importance of having a well-designed course, in order to support student learning.

To solve this problem, Shea and colleagues (2006:181) chose to apply the elements of Teaching Presence as two separate variables: “Instructional Design and Organization”, an original component of Teaching Presence; and “Directed Facilitation”, which is a combination of the items 'facilitating discourse' and 'direct instruction' (Anderson et al, 2001). This division of Teaching Presence is especially pertinent since it had already been identified that behaviours conforming to the “Directed Facilitation” element can be fulfilled by students, rather than always being the realm of the instructor (Shea et al, 2003).

In a similar vein, Arbaugh and colleagues (2008:136) made the suggestion that “*items comprising Teaching Presence might measure two distinct constructs*”. However, this is in stark contrast to earlier work by Arbaugh and Hwang (2006), which utilised empirical findings to confirm both the validity and separateness of each of the three components of Teaching Presence. It is hardly surprising, therefore, that Arbaugh and colleagues (2008) advised caution before redefining Teaching Presence.

Díaz and colleagues (2010) concurred with this cautious view, adding a further claim that the basic validity of the CoI Framework would not be impacted by the addition of a fourth

construct. This point is well made, since there appears to be no need to change the individual indicators or components which make up the CoI as a whole. However, I feel that an opportunity has been lost, by not taking the logical further step of dividing off the element of what might be termed 'design presence' from other teaching behaviours within the CoI Framework. This proposition is supported by the findings of Garrison and Cleveland-Innes (2005), when they noted that a course they were studying “*had considerable instructor engagement but showed no shift to a deep [learning] approach. From an instructional design perspective, the content and expectations (i.e., task demand) of the course simply did not require a deep approach*”. (Garrison & Cleveland-Innes, 2005:140-141), which they used as evidence for the importance of Teaching Presence when achieving critical discourse. However, since it appears that neither of the other two elements of Teaching Presence (facilitating discourse; direct instruction) could compensate for the inherent lack of course design, this could, instead, be seen as a cogent argument in favour of 'Design Presence' being separate from Teaching Presence. I will return to this point during the analysis of my own data [Chapter 5].

A further conceptualisation of Teaching Presence focuses on leadership behaviours (Garrison & Cleveland-Innes, 2005). These have not been proposed as a separate set of 'indicators', but rather as the essence of this form of 'presence'. Thus, Akyol and Garrison (2011b:235) offered the simple definition that “*Teaching presence provides leadership throughout the course of study.*” Interestingly, Garrison and Cleveland-Innes (2005) made the assumption that this leadership came from the instructor. Similarly, Bogler and colleagues (2013) also assumed that tutors would be the 'leaders' and students would be the 'followers', but significantly, the work of Akyol and Garrison (2011b), made no such assumption regarding the actors involved.

2.2c CoI: Cognitive Presence

The concept of Cognitive Presence is the final element of the original CoI Framework (Garrison et al, 2000). Cognitive Presence has been defined as “*the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry*” (Garrison et al, 2001:11)

Cognitive Presence is undoubtedly the most complex of the CoI 'presences'. It contains a greater number of indicators, and unlike Social or Teaching Presence, it has been operationalised as a 4-phase sequential model in its own right, referred to as 'the Practical Inquiry Model' (Garrison et

al, 2000; 2001), to express the student's learning journey towards deep understanding: Triggering Event; Exploration; Integration; and finally Resolution [Figure 2.2, below].

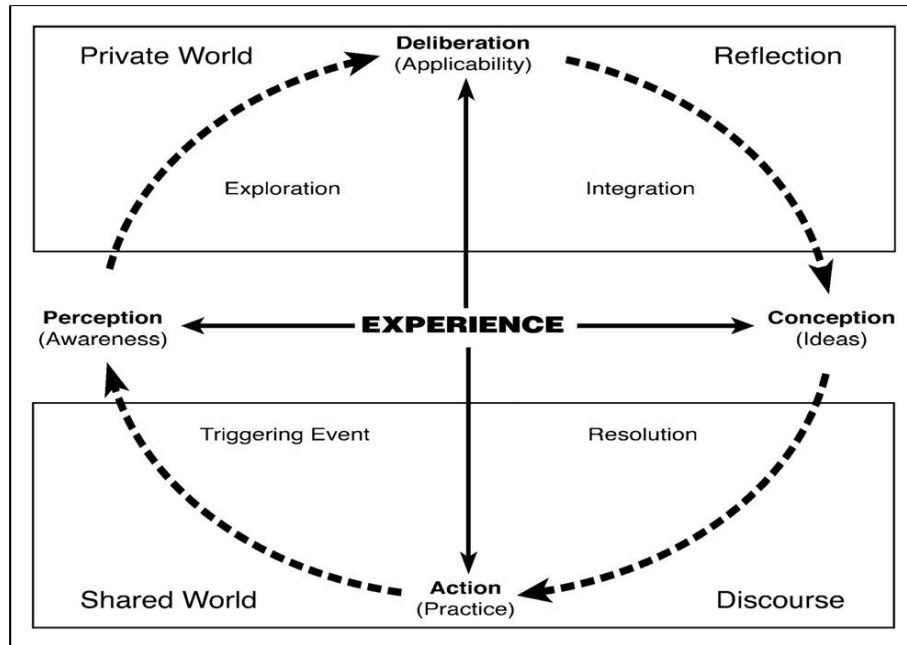


Figure 2.2: *Practical Inquiry Model (Garrison et al, 2001), reproduced with permission*

This model was developed out of two earlier theoretical models – a 5-phase model of the social construction of knowledge (Gunawardena, Lowe & Anderson, 1997); and most especially, a conceptual model for the development of critical thinking in adult learners (Garrison, 1991), thus making Cognitive Presence not only the most complex but also the most highly theorised of the CoI 'presences'.

It was noted by Garrison and colleagues (2001) that the initial Triggering Event, such as a problem or question, was often (but not always) posed by the instructor. Thus, we again see some overlap of roles between student and instructor, as noted earlier for Teaching Presence (Rourke & Anderson, 2002).

Garrison and colleagues (2001) also noted that learners may feel comfortable remaining in the Exploration phase, and may thus need a Teaching Presence challenge to move them on to develop the critical thinking evidenced in the third and fourth phases of inquiry [Integration and Resolution]. Garrison and Cleveland-Innes (2005) further supported this view, highlighting the association between Teaching Presence and Cognitive Presence, when they proposed that:

CHAPTER 2: LITERATURE REVIEW

“we find the leadership role of the instructor to be powerful in triggering discussion and facilitating high levels of thinking and knowledge construction.”

(Garrison & Cleveland-Innes, 2005:137)

A potential problem, however, both with the CoI concept of Cognitive Presence and with the associated Practical Inquiry Model (Garrison et al, 2001) is that indicators of each phase are not always apparent in discussion forum transcripts. Indeed, even Celentin (2007), whose work with graduate teacher educators notably found greater evidence than most, still found only 1-4% of postings in the 'Resolution' phase, with a further 17-22% of postings in the 'Integration' phase.

This lack of evidence, especially for the final 'Resolution' phase, has led some authors to express concern, and thus to question the efficacy of CoI model overall. Indeed, Rourke and Kanuka (2009:19) came to the worrying conclusion that this *“indicates that it is unlikely that deep and meaningful learning arises in CoI”*, thus challenging the effectiveness of CoI as a pedagogic tool to support or enhance learning.

However, Akyol and colleagues (2009a) refuted the sustained attack of Rourke and Kanuka (2009), pointing out substantial flaws in their review (for example, incomplete coverage of relevant studies), and reaffirming the proposition that CoI was founded on a sound theoretical base. A further refutation of the antithetical stance of Rourke and Kanuka (2009) was published by Jézégou (2010), who had undertaken meta-analyses of extant work in direct response to the call made by Rourke and Kanuka (2009) that further research on the main constructs of CoI was urgently needed. She further commented:

“This work, complex and laborious, has eliminated our doubts about the model’s conceptual solidity and its relevance”

(Jézégou, 2010:para 35)

Furthermore, Akyol and colleagues (2009a) also drew the distinction between constructivist and objectivist approaches, noting the highly significant point that CoI is focused on the process of learning, rather than on the product (*ie*: outcomes).

Thus, an alternative interpretation of the frequently observed dearth of 'Resolution' indicators is simply that we should seek evidence of learning, as represented by this final phase of Cognitive Presence, elsewhere than in the online discussion forum (Archer, 2010). Furthermore, Archer (*ibid.*) proposed that in order to gain a view of the fuller picture, we need to consider the course as a whole, and not simply the discussion forum, perhaps finding greater evidence of both 'Integration' and 'Resolution' in students' assignments. This supports the hypothesis of Akyol

and Garrison (2008:16) “*that students very likely applied their resolution thoughts to their major course redesign project*”. They further explained that evidence of higher-order thought was not captured in the discourse process itself, since students were not required, in that programme, to share their insights with others; and so they imply that the discussion process simply serves as a catalyst for the development of critical thinking.

This viewpoint is further supported by Swan (2005:4) when she reminds us that Vygotsky's original conception of social constructivism is a two-phase process, whereby “*meanings are first enacted socially and then internalized individually*”. Thus, it is argued that the higher, cognitive element of learning (the *intrapersonal*, or *intrapsychological* element), happens only after the social interaction that forms its essential foundation (Vygotsky, 1978: 57).

Thus, guided by both Swan (2005) and Vygotsky (1978), I agree with both Archer (2010) and Akyol and Garrison (2008) – and despite Haughey's (2007:144) ethical proposition of “*the responsibility of learners to be communal as well as committed to personal cognitive goals*”, I would question why indeed should we expect to see the pinnacle of learning expressed in a communal forum, when the assessment of students' achievement in formal educational courses remains very largely individually-based.

Here, it is, perhaps, also significant to remember that Anderson's earlier 5-phase model (Gunawardena, Lowe & Anderson, 1997) was based on online interaction amongst participants at an international academic conference, whose very existence is predicated on the sharing of participants' insights, and further tested in the adult continuing education context, rather than in an award-bearing course in higher education, thereby removing the potential constraints imposed by individual student assessment.

Meanwhile, Redmond (2014) has proposed that reflection should become an additional indicator of the Resolution phase of Cognitive Presence. On the one hand, this does work to show greater evidence of higher-order thinking in discussion threads, and indeed, the research presented by Redmond (op.cit.) shows achievement of the Resolution phase only when this new reflection indicator is added. Thus, it is possible that this modification could be another way of coping with the previously noted (and for some, highly problematic) dearth of examples of Resolution within online discussion boards.

Redmond (op.cit.) argues that *“reflection is a process which is associated with high levels of thinking and as such should be coded at the higher level of critical thinking, within the resolution phase.”* (Redmond, 2014:54). This is an interesting proposition, although perhaps a little simplistic. I would suggest that in order to establish higher-order critical thinking, we must see evidence of *critical* reflection, rather than simple first-level descriptive reflection. One might ask, therefore, whether the indicators *“Reflecting on learning outcomes”* and *“Reflecting on learning processes”* are sufficiently specific to exclude first-level reflection and only pick up higher-order criticality. To support her argument, Redmond (ibid.) cites the original CoI team, stating:

“the term ‘reflection’ does not overtly exist within the indicators of cognitive presence as defined by Garrison and others. In a recent publication, these authors assert that learners move through the four phases of cognitive presence ‘in an environment of reflection and discourse; analysis and synthesis’ (Garrison, Cleveland-Innes et al, 2010, p. 32). Based on the discussion above this article proposes an additional indicator should be added to the resolution phase of cognitive presence, being that of reflection.”
(Redmond, 2014:49-50)

However, this critical reflection is already an underpinning element of the CoI. Furthermore, there is a reason for reflection not appearing in the Resolution phase of Cognitive Presence – if we refer back to the Practical Inquiry Model (Garrison et al, 2001) [Figure 2.2], we see that reflection is associated with the *Integration* phase of learning, whilst discourse is associated with Resolution. The Practical Inquiry Model is drawn from an almost identical earlier offering from Garrison (1991), and thus it is also important to note Garrison's accompanying explanation that:

“it is important to realize that throughout the critical thinking/learning cycle there is an alteration of collaboration and reflection. This process is essential to the development of knowledge in the best sense of an educational experience. ... Reflection-in-action questions the assumptional structure of knowing-in-action (i.e., exploration phase) and gives rise to on-the-spot experiment where new actions are developed and tested (i.e., applicability and integration phases).”
(Garrison, 1991: 291)

Furthermore, I would suggest that we should also consider other comments from Garrison, to set the one quoted by Redmond (op.cit.) into context. Firstly, I would consider:

“At the heart of a meaningful educational experience are two integrated processes: reflection and discourse. These are the two inseparable elements of inquiry in higher education. ... Collaboration is a key component of a community of inquiry. However, collaboration must include communication or discourse that is purposeful, threaded and reflective.”
(Garrison, 2006:25)

CHAPTER 2: LITERATURE REVIEW

And it is also of note that Garrison (2006: 28) in proposing online collaboration principles, suggests for cognitive presence: *“Principle: Establish critical reflection and discourse that will support systematic inquiry”*.

Thus, it seems that reflection is already included within the Practical Inquiry Model that underpins CoI Cognitive Presence; and I would therefore suggest that adding the reflection indicators as Redmond (op.cit.) has proposed unfortunately also means completely restructuring the 'Practical Inquiry Model' (Garrison et al, 2001) which underpins the notion of Cognitive Presence in CoI. Of course, it may be that it is time to re-think the Practical Inquiry Model, not least because of the well-known problems identifying 'Resolution' in CoI Cognitive Presence. But it also seems reasonable to tread with caution, most especially when seeking to add 'new' indicators that are already embedded in other elements of the model; and to further establish whether or not the current construction of Cognitive Presence is truly fit for purpose.

Meanwhile, Annand (2011) also set out explicitly to support Rourke and Kanuka (2009) in their challenge to the CoI (Garrison et al, 2000), but chose to focus his main argument on the construct of Social Presence, challenging its significance in influencing learning and the achievement of Cognitive Presence, stating:

“The recurring suggestion of recent CoI-based empirical research is that social presence is of questionable value in the online higher education learning experience because it does not appear to have an important effect on cognitive presence”.

(Annand, 2011:49)

However, this was a review article offering no new research findings to support this hypothesis. This is in direct contrast to the more recent empirical findings of both Hostetter and Busch (2013) and Lee (2014) who found that Social Presence correlates positively with the achievement of higher order thinking and also with higher levels of student achievement in summative assignments; whilst MacNeill and colleagues (2014) also identified 'collaboration' as being significant for higher-order thinking.

Furthermore, in a response to Annand (op.cit.), Garrison (2011b) posited the view that Social Presence *“is an essential construct in a collaborative constructive approach to learning”*, pointing out that Annand's interpretation was seemingly based on a different paradigm, which did not place a high value on collaboration. He goes on to state further that:

“The reality is that the CoI theoretical framework is essentially incompatible with traditional distance education approaches that value independence and autonomy over collaborative discourse”
(Garrison, 2011b: para 2)

This, then, is a forceful and timely reminder of the social constructivist context and underpinning beliefs in which the CoI was founded. The extent to which this also resonates with my own course context will be discussed in Chapters 5-8.

This argument is also highly pertinent to the proposition of Bleazby (2012), who utilised the findings of Rourke and Kanuka (2009) to argue that CoI is inherently unsuited for internet-based learning. However, this essay is based on two misconceptions, which lead her to posit a majorly flawed argument. Firstly, Bleazby (2012) draws no distinction between 'students' of any age and in any context, citing, for example, studies with schoolchildren (Cheong & Cheung, 2008, cited in Bleazby, 2012:9) as evidence within her paper. This is highly problematic, since the CoI theoretical framework was designed for adult learners in the situated context of collaborative university learning (Garrison et al, 2000). Therefore, whilst her arguments may well hold for some teaching contexts, it is both unfair and misleading to make a blanket generalisation based on the inapplicability of the CoI model to a context for which it was never designed.

Secondly, she draws no distinction between any use of 'the internet' or technologies utilised within a learning context, considering all uses of text-based technology as examples of 'e-learning' (Bleazby, 2012:10). Clearly, this approach is also somewhat problematic. As I have already discussed [Chapter 1], e-learning, certainly of the type conceptualised in the CoI model, is more than the simple addition of one or more technologies into an otherwise traditional educational setting. Thus, Bleazby's discussion of internet search engines and hyperlinks, as two further examples, illustrates very clearly that she has failed to take account of the element of collaboration essential for CoI learning. Indeed, Garrison (2011a) sums this up when he states:

“Ultimately e-learning is not about technology, it is about flexibility, connectivity and community”
(Garrison 2011a: 78)

2.2d Interactions of CoI 'Presences'

Whilst the three elements of 'presence' have so far been discussed separately, some aspects of the relationship and overlaps between them have already been noted. Indeed, Jézégou (2010) commented particularly on the 'intertwined' nature of the three CoI 'presences'. This is, perhaps,

unsurprising, since the original Venn diagram represented each of the 'presences' as overlapping with the other two (Garrison et al, 2000) [Figure 2.1].

However, Garrison, Cleveland-Innes and Fung (2010:35) have more recently recommended that further research is still needed *"in exploring the dynamic relationships among the presences"*. Kupczynski and colleagues (2010) agreed with this proposition, commenting that the interactions between the CoI 'presences' have yet to be fully understood. But it cannot be denied that some convincing links have already been established. For example, building on Swan's proposition (2003a) of the significance of interaction, Beuchot & Bullen (2005) explored the relationship between 'interpersonality' and interactivity. Interpersonality was defined here as social interaction specifically designed to foster the building of relationships; and thus can be seen to be closely related to 'social presence'. Furthermore, they state that their finding of interpersonal interaction in a cohort of Mexican graduate students lends support to the CoI proposition that Social Presence is required for Cognitive Presence to occur (Beuchot & Bullen, 2005:82).

Garrison and Cleveland-Innes (2005:133) stated that *"interaction is not enough"*, seeking evidence of cognitive presence in addition to social presence. On the one hand, this sounds perfectly reasonable – the CoI consists of three presences, not just one. But it might also be considered that they seemingly confuse 'interaction' with 'communication' – an unfortunate misunderstanding bearing in mind Garrison's earlier theorising on Transactional Relationships in higher education (Garrison & Baynton, 1987; Anderson & Garrison, 1998). Furthermore, if we compare, for example, Moore's (1989) simple typology of interaction [learner-content; learner-instructor; and learner-learner], then an alternative interpretation arises - so Garrison and Cleveland-Innes (ibid.) could be regarded as stating that interaction *with each other* is not enough, and we must also see interaction *with course content* in order for learning to occur. Note that interaction and transactional relationships will be considered again, later in this chapter, under Theme 4 [Section 2.5].

The proposition that Social Presence is a necessary precursor to achieving Cognitive Presence can also be found in more recent research conducted by Archibald (2010), whereby *"standard multiple regression was used to predict the effects of social and teaching presences on the development of cognitive presence"*. (Archibald, 2010:73). There is a claim made in this paper that the results of this analysis indicate that 69% of the variance in cognitive presence could be accounted for by teaching presence and social presence. This sounds highly convincing at first,

CHAPTER 2: LITERATURE REVIEW

given that Cognitive Presence is widely acknowledged as building on the other two 'presences'. However, this appears to be a presentation of work in progress; and since no details of the hierarchical multiple regression were given, it is difficult to be certain how this figure was derived, or the overall significance that Archibald (2010) attributes to Social Presence or Teaching Presence within the overall CoI Framework.

It is, perhaps, more convincing, however, to note that Archibald's work (op.cit.), whilst not making the link explicitly, nevertheless does seem to agree with the more cautiously framed yet robust evidence offered by Shea & Bidjerano (2009), linking Cognitive Presence and *"instructors' skills in fostering teaching and social presence"* (Shea & Bidjerano, 2009:551) in which they make clear the distinction, discussed earlier, between instructor Social Presence and student Social Presence.

Both of these studies, however, contradict the findings of Akyol and Garrison (2008) that Social Presence was associated only with student satisfaction, and not with perceived learning. It should be born in mind, however, that Akyol and Garrison (2008) analysed a single module, over only a 9-week period. It may be, therefore, that this time period was simply too short to fully discern the interactions of the different CoI 'presences'.

Meanwhile, the inherent inter-relation and interactions between aspects of Teaching Presence, Social Presence and Cognitive Presence were also highlighted by Akyol and Garrison (Akyol & Garrison, 2011a; Garrison & Akyol, 2013, 2015) in their ongoing investigation of metacognitive processes (identified as 'knowledge of cognition'; 'monitoring of cognition'; and 'regulation of cognition') in the discussion forum of an online graduate course. In this work, greater emphasis was placed on Teaching Presence and Cognitive Presence, which seemingly supports their earlier findings (Akyol & Garrison, 2008).

As noted above, Redmond (2014) proposed the addition of reflective indicators into Cognitive Presence, and I have questioned the appropriateness of this move. However, I do strongly agree with Redmond (2014:55-56) that the aspects of cognitive presence illustrated by the proposed new 'reflection' indicators *"Reflecting on learning content and outcomes"* and *"Reflecting on learning processes"* match more closely to the notion of metacognition (Akyol & Garrison, 2011a; Garrison & Akyol, 2013, 2015) than to the rather outcome-based focus of existing indicators of Cognitive Presence. Interestingly, this takes us back to the model of social construction of knowledge from Gunawardena and colleagues (1997), which is the other model

that fed into the original development of CoI cognitive presence, along with the Garrison (1991) model. As noted above, Gunawardena and colleagues (1997) had proposed a 5-phase model, and it should be noted that metacognitive statements illustrating how individuals' understanding or way of thinking has changed were an element of the final part (Phase V) of this model. Thus, it seems that Garrison and colleagues are today moving towards the adoption, or re-adoption, of a fifth phase within Cognitive Presence, which takes them full-circle back to their origins. Meanwhile, it is also interesting to note that Weerasinghe and colleagues (2012b) identified the overlap area in the CoI Venn diagram, between Teaching Presence and Cognitive Presence as the home of '*Metacognitive Presence*'.

However, as Akyol and Garrison (2011a) pointed out, Social Presence is undoubtedly a necessary pre-requisite to both Teaching Presence and Cognitive Presence, since students must feel comfortable with each other before they can question, challenge or co-construct knowledge, and they found significant evidence of metacognition in online discussion, leading them to conclude that "*A community of inquiry provides an important function to diagnose and correct participants thinking*" (Akyol & Garrison, 2011a:189).

Meanwhile, the interactions between Teaching Presence and Cognitive Presence were explored by Kanuka and colleagues (2007) who analysed different types of instructional activity with a cohort of 19 4th-year undergraduates over a 13-week period, to identify any impact on Cognitive Presence. They concluded that although evidence of Cognitive Presence was not high (especially the latter phases), the best impact was achieved by well-structured activities, which also provided clearly defined roles and responsibilities for the students, and provoked the students to explicitly confront others' opinions. Disappointingly, however, when Richardson and Ice (2010) conducted a similar enquiry into the impact of instructional strategies, based on a similar sample of 29 undergraduates over a 15-week period, their findings remained inconclusive and indicated the need for further work. Thus, it appears that our understanding of the interaction of Teaching Presence and Cognitive Presence remains as yet incomplete.

2.2e Modifications to the CoI Framework

To complement the existing three 'presences', Lui and colleagues (2007) posited the need for 'Expertise Presence' within a community of inquiry, which was defined as "*a persistent contribution of knowledge relevant to the purposes of the computer conferences*" (Lui et al, 2007:1024). Furthermore, they also proposed that "*if there is a lack of expertise presence, then*

CHAPTER 2: LITERATURE REVIEW

interactions that facilitate learning will not happen” (Lui et al, 2007:1021), noting, however, that expertise did not have to come from the instructor, but that such injections of knowledge could also come from fellow students. This is highly reminiscent of the findings of Rourke and Anderson (2002) regarding peer facilitation behaviours within Teaching Presence.

It is noteworthy that the indicators of 'expertise presence' developed by Lui and colleagues (2007:1025) can all seemingly be found in the list of indicators of 'Direct Instruction', one of three components of the CoI Teaching Presence identified by Anderson and colleagues (2001:10), summarised in Table 2.1:

Indicators of Expertise Presence - Lui et al, 2007	Indicators of Direct Instruction (an element of CoI Teaching Presence) - Anderson et al, 2001
1. Responding/answering questions	1. Present content/questions
2. Providing feedback	2. Confirm understanding through assessment and explanatory feedback.
3. a) Sharing personal knowledge b) Sharing knowledge from other sources	3. Inject knowledge from diverse sources, e.g., textbook, articles, internet, personal experiences (includes pointers to resources)
4. Identifying misconceptions	4. Diagnose misconceptions
	5. Focus the discussion on specific issues
	6. Summarize the discussion
	7. Responding to technical concerns

Table 2.1: Comparison of indicators of Expertise Presence (Lui et al, 2007) with indicators of Direct Instruction (Anderson et al, 2001)

Thus, it would appear that there is no need to introduce an additional element of 'expertise presence' into the CoI model, since it was already there, albeit by another name, from its very inception. However, it is potentially useful and significant to re-conceptualise this element of Teaching Presence in terms of 'expertise', when exploring the expectations of participants, and, indeed, the role of the online tutor, so I will return to this later, in Chapters 5-8.

It is, perhaps, also significant that the work of Lui and colleagues (2007) offers reassurance that the constructs of the CoI model are applicable in an Asian (Hong Kong) context, as well as in their Western home context.

The same year, Pozzi and colleagues (2007), proposed a modified “*five-dimensional model that includes a participative, an interactive, a social, a cognitive and a teaching dimension*” (Pozzi et al, 2007:169), seeking to combine the three elements of the CoI (Garrison et al, 2000) with aspects of the earlier framework developed by Henri (1992), in order to provide tutors with a tool for tracking and monitoring students during a course. Thus, in addition to the three CoI 'presences', they also included indicators of 'participation' (active participation; passive participation; and continuity) and 'interaction' (passive participation before posting; references to other students' messages; and consideration of other students' contributions in products) in their theoretical model. Whilst at first sight this may seem to offer a useful enhancement to CoI, and a reinforcement of the diagnostic potential of the CoI (Akyol & Garrison, 2011a), further consideration of the model proposed by Pozzi and colleagues (2007), quickly indicates two potential flaws which could make it difficult, if not impossible, to operationalise as stated.

Firstly, there is the problem of identifying evidence - for example, 'passive participation' (ie: reading messages as opposed to posting them) is not possible to discern from the discussion forum, since by its very nature there is no action evidenced; similarly, it is not possible to readily discern the number of messages read prior to making a posting (one of the indicators of 'interaction'). The authors themselves may have been aware of these limitations, since they advocated drawing on a mixture of raw VLE data, content-analysis, and questionnaires or interviews, which, in my opinion, does not make this framework practical to administer on an ongoing basis. This first potential flaw may have been resolved, at least partially, in later work (Pozzi, 2009; Persico et al, 2010), but the second issue is more problematic.

The second potential flaw relates to the way that the indicators of 'presence' are operationalised in this model – that is, for monitoring the engagement of individual students. However, the CoI is conceptualised around collaborative learning in a community context (Garrison, 2011a), with no distinctions between community participants, so the proposed focus on categorising the actions of individuals is, perhaps, less useful than the authors imply (Pozzi et al, 2007).

As noted above, after further work, this model was reduced to only four dimensions (Pozzi, 2009; Persico et al, 2010), with the interactive element removed completely; and 'passive participation' re-labelled as 'reactive participation', on the grounds that the act of reading is not passive - a point with which I concur. I am, however, still somewhat concerned regarding the continued focus on individuals rather than groups; and I also retain some reservations as to whether the problems of identifying 'reactive participation' can be so reliably solved by the technology as Persico and colleagues claim:

CHAPTER 2: LITERATURE REVIEW

“Reactive participation includes actions that are less visible, but can be tracked by the CMC system, such as reading messages and down-loading documents”

(Persico et al, 2010:8)

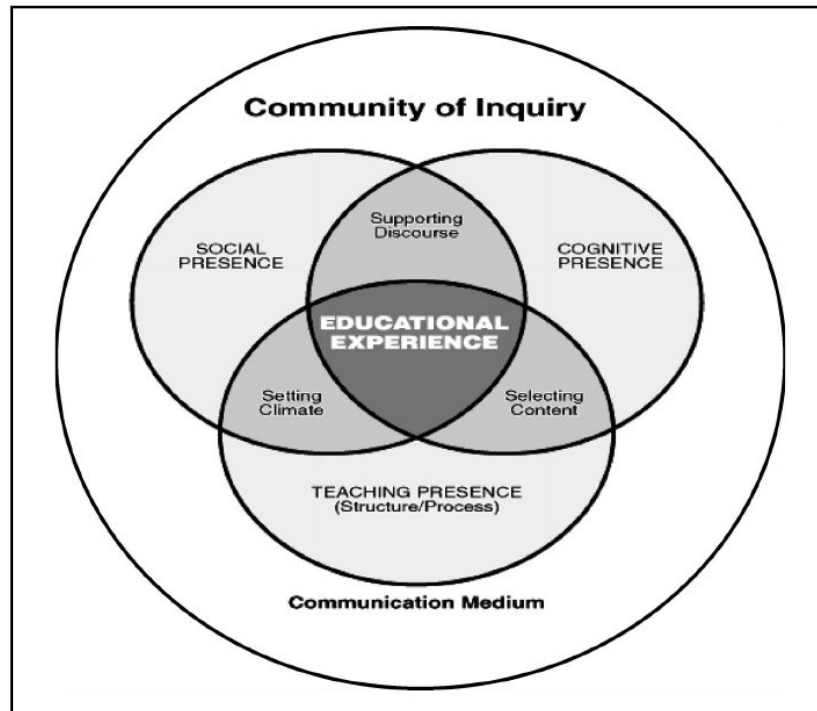
However, it may be that since the aim is simply monitoring ongoing engagement, the approximate data available from VLE automated tracking systems may indeed suffice for their purposes.

This model also replaced the original four CoI phases of Cognitive Presence [Triggering Event, Exploration, Integration and Resolution] (Garrison et al, 2001) by three, more global indicators: “Individual Knowledge Building (C1), Group Knowledge Building (C2) and Meta-Reflection (C3)” (Pozzi, 2009:671). On the one hand, this approach may mitigate against the problems discussed earlier, the lack of evidence for the latter phases of CoI Cognitive Presence (Rourke & Kanuka, 2009; Akyol & Garrison, 2008) and it accommodates the proposition from Redmond (2014) that Cognitive Presence should include reflective indicators. But on the other hand, it could be interpreted as lowering the threshold levels of learning, since it is doubtful that 'knowledge building' reaches the higher level of critical thinking implied by 'integration' and 'resolution'.

This revised framework (Pozzi, 2009) was further tested with 112 initial teacher training students, working in groups, with six tutors, over an 8-week course (Persico et al, 2010:12); and seemingly offered evidence that quantitative data from the Course Management System could be successfully layered on top of content analysis to provide indications of each of the three CoI presences, and to the expressed satisfaction of all tutors. But whilst this dual approach of CoI content analysis supplemented by CMS quantitative data may, indeed, offer tutors some additional and useful insights into the actions of their students, I would question whether this really makes it a new, four-dimensional model, as the authors claim (Pozzi, 2009; Persico et al, 2010).

Participation is also a key element for Gregori and colleagues (2012), who proposed that Technological Presence should sit as a broad, overarching fourth dimension for the CoI, whereby *“technological presence can be defined as a wide range of behaviors that constitute the students’ styles of online interaction”* (Gregori et al, 2012: 468). Their aim in this research was to 'operationalize interaction', such that they could identify the behaviours and actions which led to the achievement of cognitive presence and 'higher-order knowledge acquisition and application'.

Technological Presence is represented as an over-arching circle, surrounding the whole of the original CoI model, as shown in Figure 2.3 [below]:



*Figure 2. 3: Technological Presence in the CoI (Gregori et al, 2012)
reproduced with permission*

However, whilst I acknowledge that participation is a crucial factor for a successful CoI, it seems that the notion of 'presences' should, by the very use of that word, successfully account for active participation [whereby a lack of participation can already be clearly characterised as absence, or a lack of presence]. Differentiating posting behaviours, such as focusing on the tutor or being more collegial and peer-focused, offers highly valuable insights into a specific online group context. However, it should, perhaps, be remembered that 'Communication Medium' already sits outside of the three presences of CoI, [see Figures 2.1 and 2.3], which can therefore be seen to already offer an acknowledgement of the online environment as the over-arching dimension. Thus, whilst the work of Gregori and colleagues (op.cit.) is interesting in identifying successful online behaviours, the premise of 'technological presence' seems in itself an unnecessary addition to the existing CoI model.

More recently, Zhao and colleagues (2014) have also considered student behaviour online, although they chose to distinguish mere participation (potential monologue) from social presence and community behaviours. In their model [Figure 2.4] Social Presence is identified only in the 'interaction' and 'collaboration' phases of online engagement:-

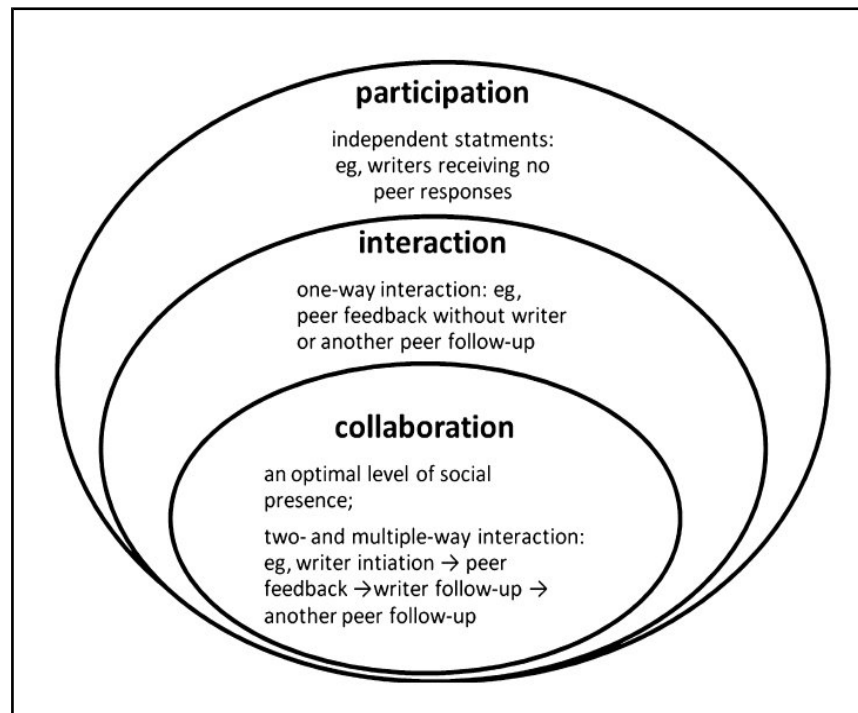


Figure 2.4: Participation, interaction, social presence and collaboration in online peer review (Zhao et al, 2014), reproduced with permission

Meanwhile, Shea and colleagues (Shea & Bidjerano, 2010, 2012; Shea et al, 2012) have also proposed that a fourth 'presence' needs to be added to the CoI, which they have called 'Learning Presence'. This is shown in Figure 2.5 [overleaf]. It was originally focused around the twin concepts of self-efficacy and effort regulation (Shea & Bidjerano, 2010), but was subsequently broadened to consider all aspects of Self-Regulated Learning behaviours on the part of students, as described by Zimmerman (2008), including meta-cognition (Shea et al, 2012). Their analysis of discussion transcripts from over 2000 higher education students (a mix of undergraduate and graduate) therefore considered the three CoI constructs of Teaching Presence, Cognitive Presence and Social Presence, along with three additional indicators of Self-Regulated Learning: Goal Setting, Strategic Learning, and Help Seeking (Shea & Bidjerano, 2012). This approach is partially supported by Jézégou (2010), who had also drawn attention to the importance of the students' ability for self-direction in a successful CoI.

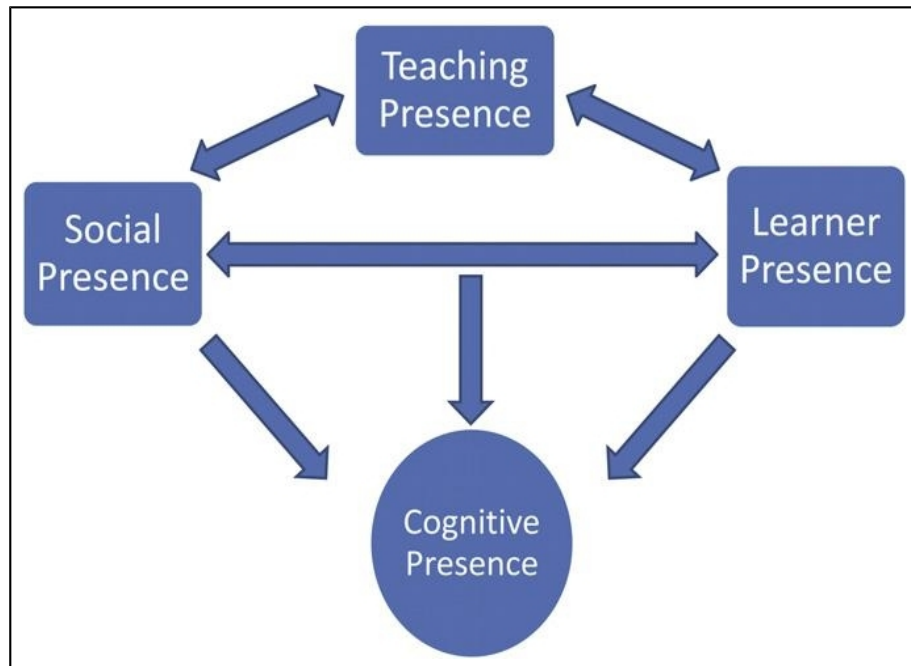


Figure 2.5: Revised CoI Model (Shea & Bidjerano, 2010), reproduced with permission

However, adding the concept of 'learning presence' also returns to the serious problem, discussed above, of focusing on actors rather than actions, in direct contradiction of the CoI ethos (Garrison, 2011a). Furthermore, the focus on self-regulatory behaviours on the part of learners focuses away from the collaborative nature of CoI, and onto individual learners.

Thus, whilst each individual's abilities with regard to self-regulation may indeed have some moderating influence on the extent to which the CoI 'presences' are displayed in discussion, as suggested by Shea and Bidjerano (2012), this cannot, in itself, be regarded as a manifestation of a further 'presence' within the collaborative community.

Therefore, I agree with the somewhat mild contra-assertion from Akyol and Garrison (2011a:188) that *"The justification for introducing the learning presence construct into the CoI framework is not clear"*; and also with the rather stronger and more recent response that it *"violates fundamental assumptions of the CoI framework"* (Garrison & Akyol, 2013:85).

Shea and colleagues, however, remain unconvinced that their new notion of Learning Presence is not a valid part of CoI, and faced with a refutation from Garrison and Akyol (2013) have responded by proposing that the CoI needs re-conceptualising (Shea et al, 2014). Their argument focuses, in part, on the aspect of Teaching Presence which is carried out beforehand,

and so must be carried out by instructors and not by learners. To me, this reinforces the argument, rehearsed earlier, for Design Presence to be a separate aspect of Teaching Presence. However, when this is added to the power and authority inherent in assessment and grading, Shea and colleagues (ibid.) argue that this is sufficient reason to view instructor and learner participation separately. They have therefore proposed a complete reinterpretation of the Community of Inquiry.

Their '*tentative reconceptualization*' of CoI (Shea et al, 2014:14) replaces Social Presence with Learning Presence, and further re-assigns aspects of Social Presence to each of the three new 'presences', and is shown in Figure 2.6, below:

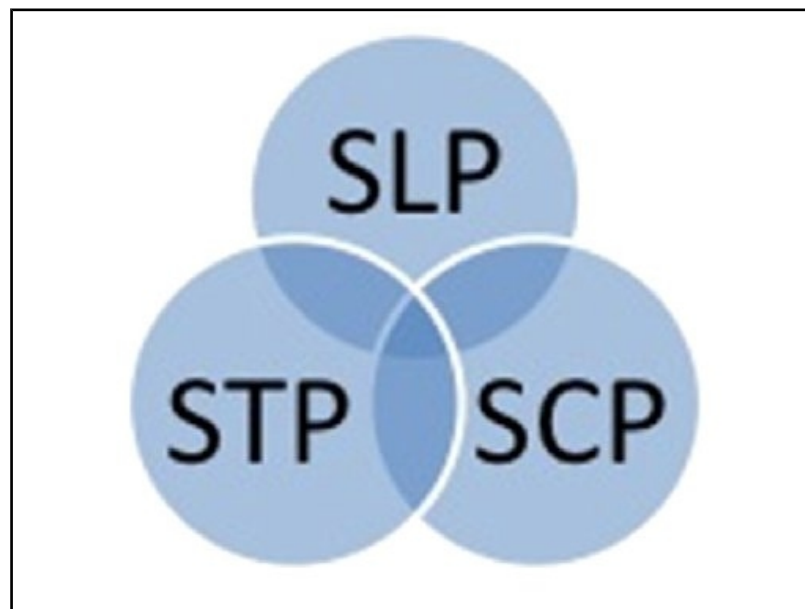


Figure 2.6: Tentative re-conceptualization of CoI (Shea et al, 2014), reproduced with permission

Shea and colleagues argue that 'Learning Presence' captures those aspects of online collaborative learning that cannot be part of the tutor role, whilst Teaching Presence should be reconceptualized to refer specifically to aspects of the instructor role. They go on to claim that:

“The contribution of this tentative representation to the enhancement of the CoI framework is that it reflects the unique contributions of students and teachers and also embeds the social dimension as part of each presence.” (Shea et al, 2014: 15)

Thus, in this new model, the three CoI presences have now become 'Social-Teaching Presence', which *“reflects the roles specific to online instructors, each with a shared emphasis on the social dimension of teaching and learning”* (Shea et al, 2014: 15); 'Social-Learning Presence', which *“reflects the attitudes, abilities, and behaviors that students bring to their individual and collaborative online activities to self- and co-regulate their learning”* (Shea et al, *ibid.*); and finally, 'Socio-Cognitive Presence', because *“the authors conclude that it is important to more clearly emphasize that knowledge construction is not simply cognitive but rather a socio-cognitive process”* (Shea et al, *ibid.*).

It is undoubtedly an interesting proposition, especially since by separating out the actions relating to instructors and learners, it may be possible to tease out more insights into the actions and roles of instructors as compared to learners. But, as with the argument for or against the introduction of 'Learning Presence' discussed above, it is immediately clear that this new re-conception of the CoI *“violates fundamental assumptions of the CoI framework”* (Garrison & Akyol, 2013:85), since it has moved away from focusing on actions, regardless of who enacts them, to focusing on more rigid definitions of role. And since this also moves away from the underpinning notion of a collaborative and inclusive community, I remain unconvinced as to its efficacy, and would therefore tend to support the proposition from Shea and colleagues (2014) that considerably more work is needed, based on study of a wider range of online learners (not just doctoral students, who are likely to be both more articulate and motivated than other students), before any re-conceptualization of the CoI can be fully accepted.

Meanwhile, Campbell and Cleveland-Innes have suggested that 'Emotional Presence' should be considered as a potential fourth and separate element of the CoI Framework (Campbell & Cleveland-Innes, 2005; Cleveland-Innes & Campbell, 2012), noting a significant impact on both Teaching Presence and the Cognitive domain. There is here a close resonance with Illeris' (2003) conceptualisation of learning as comprising of three main *processes*, which he defines as cognitive, emotional and social.

In support of the separate identification of Emotional Presence with the CoI framework, Cleveland-Innes & Campbell (2012) propose that:

“Emotional presence is the outward expression of emotion, affect, and feeling by individuals and among individuals in a community of inquiry, as they relate to and interact with the learning technology, course content, students, and the instructor.”

(Cleveland-Innes & Campbell, 2012:283)

However, the three elements of 'presence', as conceived in the original CoI (Garrison et al, 2000), have already been noted as firmly inter-related (Garrison & Cleveland-Innes, 2005; Garrison, Cleveland-Innes & Fung, 2010), and with areas of overlap between categories (Jézégou, 2010). Furthermore, the *affective indicators* within Social Presence (Garrison & Anderson, 2003) were originally identified as “*emotional expression*” (Garrison et al, 2000:99), and subsequently referred to by Rourke and colleagues (1999:56) as “*emotional presence*”, before rejecting this definition in favour of “*affective indicators*”.

Thus, since Social Presence has been clearly identified as encompassing the emotional aspects of the learning process, and as a precursor to the attainment of a Cognitive Presence (Beuchot & Bullen, 2005; Shea & Bidjerano, 2009), this proposition for the addition of a separate fourth 'presence' may perhaps be seen as unduly privileging the emotional aspect of learning.

2.2f Resonance with Other Taxonomies

It should be noted, of course, that the CoI, whilst being widely accepted as a significant model, is by no means the only taxonomy available for analysing interactions in online learning. For example, an alternative model has been proposed by Blignaut and Trollip (2003a, 2003b, 2005a) who followed the same methodology adopted by Garrison and colleagues (2000) to derive the CoI indicators of 'presence', in order to develop a separate taxonomy, which is specifically designed to explore the actions of instructors – as compared to CoI, which does not distinguish between the activity of instructors or learners. Blignaut and Trollip (*ibid.*) offer three elements of tutor activity ‘*without academic content*’: Administrative, Affective, and Other (including presenting discussion topics); along with three elements of activity ‘*with academic content*’: Informative, Socratic, and Corrective. And although the appropriateness of attributing the allocation of topics for discussion to a category *without academic content* ('Other') may be questioned, nevertheless, the Blignaut and Trollip (2003a, 2003b, 2005a) taxonomy offers a simple and clear overview of the actions of the instructor, encompassing aspects of Social, Cognitive and Teaching Presence from the Community of Inquiry Framework (Garrison et al, 2000; Garrison & Anderson, 2003; Garrison, 2011a). The match between elements of these taxonomies is shown in Table 2.2, overleaf.

CHAPTER 2: LITERATURE REVIEW

CoI: Garrison et al (2000)	Blignaut & Trollip (2003a, 2003b)	Coppola et al (2002)
Cognitive presence: Triggering event	Other (<i>ie: posting of discussion topics</i>)	Cognitive Roles: Thinking, reasoning, analysing
Cognitive presence: Exploration	Socratic	Cognitive Roles: Thinking, reasoning, analysing; Information storage.
Cognitive presence: Integration	--	--
Cognitive presence: Resolution	--	--
Social presence: Affective	Affective	Affective Roles: Energy/Humour
Social presence: Open communication	Affective	Affective Roles: Energy/Humour; Non-verbal communication.
Social presence: Group cohesion	Other	Affective Roles: Intimacy
Teaching presence: Design & organisation	Administrative; Affective; Other.	Managerial Roles: Course Planning; Organising; Controlling.
Teaching presence: Facilitating discourse	Socratic	Managerial Roles: Leading; Digital Socrates.
Teaching presence: Direct instruction	Corrective; Informative.	Managerial Roles: Leading; Controlling.

Table 2.2: Comparison of elements of CoI and two alternative (tutor-focused) taxonomies

The Blignaut and Trollip Taxonomy (*op.cit.*) is of particular interest to my own study, due to its focus on the actions of the instructor. Thus, I have applied this taxonomy, in addition to the CoI, to extend and enhance the analysis of my data (Sherratt, 2008a, 2008b, 2008c). This will therefore be discussed further in Chapter 5.

Meanwhile, a further example of an alternative taxonomy, also focused on the instructor, is that identified by Coppola and colleagues (2002), who proposed that tutor activity can be categorised into a range of *Cognitive Roles*; *Managerial Roles* and *Affective Roles*. The

individual elements of these roles are not listed comprehensively, but it is, nevertheless, possible to identify key aspects of each role from the exemplars provided (Coppola et al, 2002). The match between elements of this taxonomy and the CoI (Garrison et al, 2000) is also included in Table 2.2.

It is notable that the taxonomies of both Blignaut and Trollip (2003a, 2003b) and Coppola and colleagues (2002) offer a fairly comprehensive coverage of CoI Indicators (despite some overlap where descriptors appear in more than one category), with the obvious exception of the final two stages of CoI Cognitive Presence: Integration and Resolution; and I would suggest that there may be two possible reasons for this gap.

Firstly, it has already been noted (above) that Integration and Resolution are somewhat difficult to find within a course Discussion Forum, and so it should not be surprising that the slightly later taxonomies have not included these problematic elements. Alternatively, it may be seen that the Integration and Resolution phases of Cognitive Presence represent evidence of learning, and therefore should be largely the domain of the students; whereas both Blignaut and Trollip (op.cit.) and Coppola and colleagues (op.cit) are focused exclusively on the activity of the tutor – and whilst Coppola and colleagues do acknowledge that tutors can also learn from their students, this is not a major facet of the online course, nor of tutor activity. It seems, therefore, that there can be an adequate reason for the gaps in Cognitive Presence within both alternative taxonomies.

At first sight, there also appears to be a markedly different characterisation of teaching (the 'Managerial Roles' of Coppola and colleagues, 2002) but this actually maps very comfortably to 'Teaching Presence' in CoI (Garrison et al, 2000), with the sub-category 'Leading' (Coppola et al, op.cit.) corresponding to the sub-categories of 'Direct Instruction' and 'Facilitating Discourse' (Garrison et al, op.cit.). One wonders, indeed, why these roles were not simply characterised as 'Teaching Roles' rather than managerial.

It is apparent that there is a greater emphasis on authority in the Blignaut and Trollip taxonomy (op.cit.) when compared to the CoI (Garrison et al, 2000), evidenced in the designation of a separate set of 'Corrective' inputs (Blignaut & Trollip, op.cit.) which represent one of only three possible actions 'with academic content', as compared to 'Diagnose misconceptions', which is not only less authority-laden in its use of language, but is also included as one of 7 different aspects of CoI 'Direct Instruction' (itself a sub-category of Teaching Presence) and thus has a

much lower emphasis. Likewise the designation of teaching roles as 'Managerial' by Coppola and colleagues (op.cit.), noted above, can be seen as emphasising the tutor's authority. However, this attitude can, perhaps, be explained by the focus of these two teams of authors on the activity of the teacher responsible for the course (with the implicit acknowledgement that responsibility and authority go hand in hand), as compared to the more general explorations of the activities of a whole online group, carried out by Garrison and colleagues (2000).

Overall, it seems, therefore, that the CoI conceptualisation of 'presence' is sufficiently robust to resonate strongly with other authors' models and insights into online learning, as well as standing the test of time as a model in its own right.

An underlying problem persists, however, with all of the taxonomies and models discussed above, in that they describe actions and interactions within online discussion, and offer methods of analysing them retrospectively, but they still do not assist the instructor to decide what action to take at any given time, nor do they identify what results each of the different possible actions might reasonably yield. It is clear, therefore, that whilst highly significant and helpful for analysing my own data, nevertheless, the underpinning research questions that gave rise to my study (most especially, what the tutor can do to encourage the development of online dialogue) still have yet to be answered.

2.3 Theme 2: Online Communities

In addition to the Community of Inquiry (Garrison et al, 2000), a number of other, sometimes conflicting, conceptions of online community have been discussed in recent years. This has led Gilbert (2004:44) to comment that *““Community” is a term that is especially important, and especially problematic, in education today*”. In this section of my review, I shall therefore explore further the views of a range of authors concerning online communities, their form, their function and their formation [*ie: what they are; what they do; and how they come to exist*].

2.3a Defining online communities

Gilbert (2004:44) proposed that *“One of the most important steps in building community online and on campus is to define community more clearly and identify the elements that matter most to those involved*”. However, despite having articulated some key questions to assist in this process, somewhat worryingly, he also concluded that *“We do not expect ever to reach*

unanimity about the meaning and appropriate use of the term "community" (Gilbert, 2004: 44-45).

However, whilst unanimity is, perhaps, an unrealistic aim, nevertheless, before considering how tutors might utilise online communities to support learners, it is necessary to consider some of the myriad possible definitions thereof.

One of the best known types of 'community' is the 'Community of Practice' (CoP) (Lave & Wenger, 1991; Wenger, 1998; Wenger et al, 2002). This is not inherently an online phenomenon, but rather, it refers to any group of people who come together to perform a task or series of tasks, with shared rules and 'mores' - practices, in fact. Wenger (1998) has suggested that this type of informal community is extremely common in everyday life, and exists when members of a family interact together, when schoolchildren learn together, when musicians rehearse together, or when *“Workers organize their lives with their immediate colleagues and customers to get their jobs done. ... No matter what their official job description may be, they create a practice to do what needs to be done”* (Wenger, 1998:6).

Furthermore, three essential elements of the CoP were proposed, these being: Joint Enterprise, Shared Repertoire, and Mutual Engagement (Wenger, 1998:78). So, extrapolating from this definition, it would seem that a 'Community of Practice' can, and indeed perhaps should automatically exist online when people are studying together, just as the CoP was identified by Wenger (1998:6) in the traditional face-to-face classroom context. And indeed, this is the view posited by Moule (2006a, 2006b), who offered an augmented version of Wenger's (1998) CoP framework, specifically adapting it for use in online learning [Figure 2.7, overleaf]. This framework (Moule, 2006a, 2006b) was developed from research carried out with healthcare undergraduates, including both campus-based and distance learners, engaged in an online course.

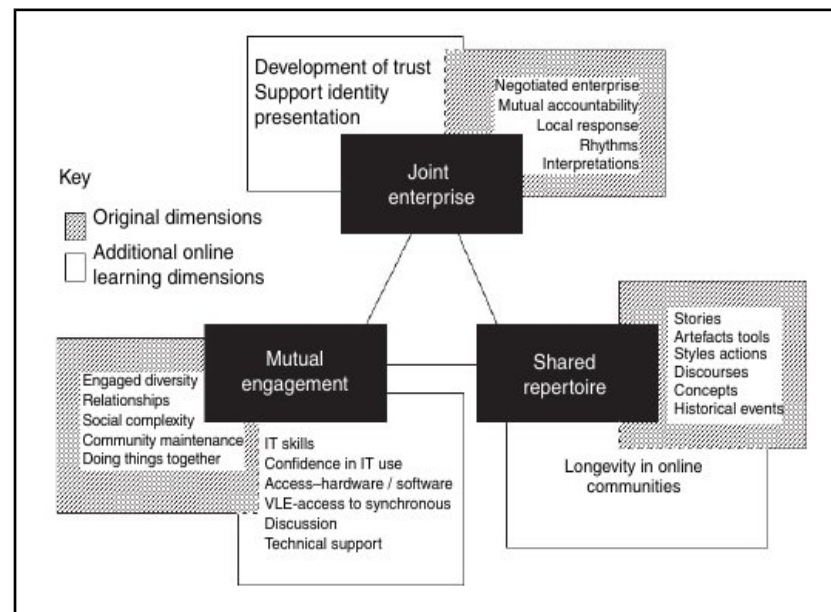


Figure 2. 7: Augmented framework for online Community of Practice (Moule, 2006a, 2006b), reproduced with permission

However, not all authors agree – for example, Gahungu and colleagues (2006:134) boldly stated that “*Online Education Has Failed to Create Learning Communities*”, citing as evidence the predominance of individual email contact between students and instructors in their home university (an established US higher education institution).

Meanwhile, Yeh (2010:150) offered a suite of four classifications for 'online learning communities', which are variously described as “*active collaboration, passive collaboration, individualized participation, and indifference*”, and which do not all fulfil criteria for online CoP. Thus, Yeh's (2010) classification may be considered somewhat problematic. By referring to all groups of online learners under the generic term of 'online learning communities' this leads to some potential confusion, since it is clear that the group manifesting '*individualized participation*' [highly active, but not much evidence of collaboration] did not meet the criteria for a Community of Practice, as posited by Wenger (1998) or Moule (2006a, 2006b), and, one might argue, did not manifest sufficient evidence of any form of communal activity to warrant the name 'community' at all. Similarly, the group characterized by 'indifference' [*ie* showing both low collaboration and low participation] also fail to meet the basic qualifying requirements for 'community', although they were still members of an online course group, by dint of enrolment.

More helpfully, Hung and Chen (2002:24) have coined the term '*quasi-community*', for online course groups, in recognition of the lack of true community characteristics. And in a similar vein, Johnson (2001) also drew the distinction between a 'virtual community' and a 'community of practice', proposing that:

“Virtual communities are groups that use networked technologies to communicate and collaborate. Communities of practice are cultural entities that emerge from the establishment of a virtual or nonvirtual organization—as opposed to the virtual community itself, which is designed. Therefore, designing a virtual community does not guarantee that a community of practice will arise because an underlying task-based learning need must exist”. (Johnson, 2001: 56)

I would suggest that this argument is also open to some challenge, however. Johnson's proposition that the use of technology does not, in itself, give rise to a CoP, is a view with which I would concur, since his 'virtual community' would fail the basic definition offered by Wenger (1998) in that it is not clear whether or not the group is doing something together, nor whether the group has co-developed any practices to allow them to do something, or whether, on the other hand, they are simply communicating with each other. This, then, is the task-based need referred to by Johnson above (op.cit.), which would indeed seem to be necessary for the existence of a CoP. However, if the members of this virtual community are not simply communicating but also collaborating, I would suggest that this implies a shared endeavour, which would then allow the group to meet the basic CoP definition. Furthermore, a final challenge is that Johnson has extended his CoP definition, and required this task-based need to be necessarily and universally a *learning* need. But whilst this resonates most strongly with the underpinning notion of social learning, which is “*part of our participation in our communities and organizations*” (Wenger, 1998:8), nevertheless, it would seem that Johnson (op.cit.) is confusing the notion of the CoP itself with the social learning that happens within its situated context (Lave & Wenger, 1991).

In contrast, however, Daniel and colleagues (2003) have posited an important distinction, that “*Although all virtual communities have an element of learning in them, not every community can be referred to as a learning community. A learning community implies that members have explicit goals involving learning*” (Daniel et al, 2003 para 56). This neatly differentiates between the CoP, which encompasses elements of practical or professional learning, and the learning community, which has learning as its main objective.

CHAPTER 2: LITERATURE REVIEW

In a similar vein, Wilson and colleagues (2004:1) have described 'Bounded Learning Communities', which *"are groups that form within a structured teaching or training setting"*, thus potentially solving one of the problems of defining whether a community has spontaneously emerged or whether it is a function of the course environment.

Meanwhile, Palloff and Pratt (2007) have also offered what I would argue to be a more successful division than that described by Johnson (2001), between online communities which actively support learning as compared to communities *"where very little learning occurs but strong social connections exist among members"* (Palloff & Pratt, 2007:43). They have also proposed that *"the key to successful online learning is the formation of an effective learning community"* (Palloff & Pratt, 2007:4), thus attributing substantial importance to community.

Conrad (2005:2) posited the view that the concept of community is not fully understood, *"beyond the fact of its usefulness to distance learners"*, thus supporting the view of Palloff and Pratt (2007) regarding the beneficial nature of community, but seemingly less certain that we have a shared understanding of the underpinning concept. Furthermore, she also found that even when online learners had been part of a successful and beneficial online learning community, they still seemed to have difficulty defining it (Conrad 2002).

In her work, Conrad (2005) used a definition of community as: *"a general sense of connection, belonging, and comfort that develops over time among members of a group who share purpose or commitment to a common goal"* (2005:2). This definition stands in clear contrast to the more specific definitions, noted above, requiring co-developed practices (Wenger, 1998) or shared learning needs (Johnson, 2001).

Interestingly, although Palloff and Pratt (2007) have acknowledged that definitions of community vary between authors (and include CoI, CoP and also other versions of community), they have nevertheless suggested that the key elements of trust, belonging and mutual support can be seen as common themes throughout (2007:26). Thus, Conrad's (2005) definition of community is much closer to this consensus view (Palloff & Pratt, 2007), perhaps representing a more mature view of the online context after several more years' experience; and it also resonates with the somewhat broader definition offered by Wenger and colleagues in 2002:

"Communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis".
(Wenger et al, 2002:4)

Thus, it would appear that notions of togetherness and identity, interaction and support all have their place in explorations of online communities.

2.3b Impact and importance of online communities

Wenger (1998:4) contends that communities are important because *"we are social beings. Far from being trivially true, this fact is a central aspect of learning."* For him, then, the existence of a community is a necessary and inherent aspect of learning. Likewise, Palloff and Pratt (2007:35) have argued that *"Many of our attempts to communicate are, at core, attempts at community building - a search for the community that connects us"*. Furthermore, Wegerif (1998:34) has also suggested that the success of an asynchronous learning network is dependent on the extent to which the students feel like 'insiders' as opposed to 'outsiders'.

In considering these views, we should, perhaps, remember that a sense of belonging had been identified some years earlier as a key human 'need' (Maslow, 1943) - and indeed today, we can still see a range of induction activities in universities across the world, designed to ensure that new students get to know each other, as they settle into their new courses. The sense of belonging together, along with the possibility for mutual support thus appears to be one potential aspect and benefit of a community.

More recently, Robinson (2009: 136) found that her *"students did self-organise into a community, sharing aspirations and circumstances as well as experience and knowledge"*, which was regarded as a positive outcome, focusing especially on the social aspect of interaction. Similarly, Paulus (2009:228) has discussed the need for 'grounding' (establishing or negotiating common ground), in order for an online course group to form into a community. This, again, is reminiscent not only of Wenger's (1998) conception of social learning in CoP, but also of the CoI requirement for Social Presence, discussed above (Garrison et al, 2000).

However, Skinner (2007:10) has also proposed that *"There are benefits to participation such as the building of social capital and personal development that may not be realised until people engage in community activities."* This, then, indicates a potential benefit of community beyond simple social support. However, it also carries an implicit challenge for online tutors, since she recognises that students may not feel motivated to join in community activity when they have not yet seen the possible personal benefit: *"The issue remains ... how to persuade people to take part when they lack the confidence or skills for doing so and are unaware of the benefits"*.

Her proposition resonates strongly with the findings of Ellis and colleagues (Ellis et al, 2004, 2007; Ellis & Calvo, 2006), who also noted that many students simply did not understand the purpose or potential benefit of online discussion. Here, then, is a clear acknowledgement of a further unanswered challenge for the online tutor, and one which is highly pertinent to my own research.

Persuasion is clearly one approach that a tutor can take, whilst another is to provide an underlying structure. For example, Yang and colleagues (2010) identified a positive impact of the online learning community on both social interaction and meaning construction, noting in particular the opportunity for collaboration and peer feedback on essays, to enhance the quality of academic writing among undergraduate English language learners. This was experienced within structured group activities, and has, thus, moved far beyond social interaction, to include also a strong element of academic discourse which was not wholly provided by the tutor – a new dimension and potential benefit for the online community.

This also has some resonance with my own earlier work (Sherratt & Sackville, 2006a), which found that groups which were ‘tutor-focused’ developed neither dialogue nor group identity as successfully as more peer-focused groups. And indeed, Ryman and colleagues (2009:46) have posited the view that *“When the community is able to function effectively, learning for the individual learner can result in a deeply transformative experience where they are able to view their practice in an entirely new way”*, arguing that critical discourse (debate, constructive controversy and development of shared meaning) is the key to achieving deep learning.

Similarly, the opportunity for sharing of experiential learning in online communities has been noted by Hara and Hew (2007); while Williams and Humphrey (2007), working with postgraduate teachers of English as a second or foreign language, noted the importance of peer interaction as well as social cohesion in online discussion groups, stating:

“the effect of the instructor’s role is not significant with respect to overall interactivity levels in the threaded discussion. So, student discussants were no more likely to reply to the instructor’s postings than to those of their fellow students”.

(Williams & Humphrey, 2007: 138)

This lack of impact on the part of the tutor is interesting, implying highly self-directed peer interactions between the students, possibly almost to the exclusion of the tutor - a view posited by Carusi (2006), who suggested that the online learning environment inherently supports a peer-facilitated structure, claiming that:

“the social relations become de-hierarchised: the teacher is no longer the central – and ‘higher’ – authority, and learners collaborate with each other, each learning through doing and each cooperating rather than competing with others in pursuit of a shared goal”.
(Carusi, 2006:5)

This description also resonates with Hara and Hew (2007) who have proposed that an inherent feature of the online environment is that it supports a “*non-competitive environment*”, which is notably a further characteristic of Wenger’s (1998) CoP. Similarly, Ho and Swan (2007) have claimed that online learning offers a more “*democratic*” form of interaction, with domination of overall dialogue by one person inherently less likely to occur. And although the opinions expressed above by Carusi (op.cit.), Hara and Hew (op.cit.) and Ho and Swan (op.cit.) might be deemed by some to be an over-optimistic view of the impact of technology, nevertheless, it does remind us of the potential for collaboration as a major affordance of online communication.

This is, however, a very different situation than that identified by other authors. For example, Wilson and colleagues (2004:7) posited the view that “*Teachers are a critical component of bounded learning communities*”; Celentin (2007) also proposed that guidance from tutors is the way to achieve meaningful learning; while Palloff and Pratt (2007) proposed that the tutor's role as guide and *sheepdog* [my word, not theirs] is vital to ensure that learning occurs in online communities; and Ryman and colleagues (2009) also ascribed particular significance to facilitation and parallel leadership.

And yet, in contrast to these commentators, Rovai (2002) has also reminded us that self-directed learners do not respond well to an authoritarian approach on the part of the tutor. This leads inevitably to the question of how the tutor should best behave in order to support learning and the achievement of a learning community, and the extent to which students can and should work democratically and autonomously.

2.3c The Formation of an Online Community

It appears, then, that the existence of a learning community for online learners is desirable – but how can this best be achieved, and what is the impact of the tutor?

Interestingly, Moisey and colleagues (2008) found that the most significantly correlated activity for the formation of an online community was simply reading other students' postings, to engender a sense of 'connectedness'. This, then, is in direct contradiction to the received wisdom

that 'lurkers' who read but do not say anything in return, are counterproductive. For example, Goodfellow and Hewling (2005:358) opine: *“non-participants (or ‘lurkers’) not only fail to do what is best for themselves, but also threaten to undermine the efforts of the community to learn collaboratively”*. Similarly, Nagel and colleagues (2009:37) have claimed that *“Read-only-participants disrupt the formation of a virtual community of learners and compromise learning”*.

Similarly, Thompson and MacDonald (2005: 244) have proposed that *“conversation is pivotal to interaction”*; meanwhile, both Dixson and colleagues (2006), and more recently also Abedin and colleagues (2014) have noted the importance of students feeling comfortable to make social postings. This resonates strongly with the work of Daniel and colleagues (2003) who proposed Social Capital as a vital component of the learning community – although some might argue, perhaps, that high levels of social engagement in the group could be seen as simply an indicator of the existence of a strong sense of community rather than in any way causal in nature. Nevertheless, this does underline the inherent need for students to communicate with each other in order for a community to form. Encouraging dialogue in the online context could thus be considered an important task for the online tutor.

In addition, Shackelford and Maxwell (2012:254) have proposed that *“Instructor modeling, or the demonstration of expected communication behaviors by the instructor”* is a key way to support the creation of a community, by showing students how to interact and engage each other in conversation; further commenting that *“This important form of interaction is highly valued by students, but instructors may not be aware of the great potential of this interaction in forming community”* (Shackelford and Maxwell, 2012:254).

This, then, suggests that students are inherently willing to engage with each other and with a community, but may not know how to do so. On the other hand, Brook and Oliver (2003) have proposed that:

“the decision to pursue or ignore membership in a community rests with the will of the individual ... it is possible for online instructors to employ forms of engagement and activity that may influence an individual's rational will to seek community membership, in the event that natural will is predisposed to ignore the possibility.”

(Brook & Oliver, 2003: 144)

This proposition has some resonance with Skinner's (2007) suggestion of the need for tutor 'persuasion', noted above, and can, perhaps, be considered as an important tutor contribution to the design and creation of an online community.

Henderson and colleagues (2007) however, have posited the view that Communities of Practice cannot be designed, nor can they be artificially created, but rather they must be allowed to *emerge* - although it is noted by Henderson and colleagues (op.cit.) that instructors can 'assist' the emergence of a community of practice by means of 'careful architecture', thus identifying a key role for course design and structured activities, in addition to facilitation and guidance.

In contrast, Moisey and colleagues (2008) have adamantly rejected the idea that communities can emerge without this specific design intervention, stating:

“Meaningful online learning communities do not just emerge spontaneously ... Designing, creating, and facilitating online communities requires careful planning and implementation ... students feel part of a purposeful community of inquiry and learning. They are connected and focused on meaningful discourse and reflection. The extent to which learning occurs is associated with the existence of such a community”.

(Moisey et al, 2008:16)

Interestingly, Johnson (2001) also proposed that a Community of Practice can emerge *within* what he has described as a 'designed community', thus potentially offering a useful compromise position. It would appear, therefore, that the context of a formal educational course should not, in itself, be seen as a barrier to the formation of a suitable community of learners, and some scope exists for the influence of course design in the process of formation, although the significance of this influence remains somewhat contested.

Meanwhile, Palloff and Pratt (2007:31) have proposed a list of five features which would allow the tutor to identify if a community has indeed formed: Active interaction; Collaborative learning (*ie* students talking to each other rather than to the tutor); Socially constructed meaning/agreement; Sharing of resources; and Expressions of support and encouragement between students. And Wilson and colleagues (2004) have also offered a useful check-list of strategies for strengthening Bounded Learning Communities, divided into seven key areas: Shared goals; Safe and supporting conditions; Community identity; Collaboration; Respectful inclusion; Progressive discourse toward knowledge-building; and Mutual appropriation. This resonates with the list of four main factors or dimensions that Rovai (2002:3) has claimed are *“known to enhance the formation of community”*: Spirit, Trust, Interaction, and Common

Expectations (*ie* learning); and also with the four community-oriented design principles [Situatdness, Commonality, Interdependency, and Infrastructure] proposed by Hung and Chen (2001).

Thus, it appears that the online tutor needs to ensure that students communicate, collaborate, and feel a mutual sense of belonging; and that achievement of these is a main objective both for online facilitation and also for course design. However, Vrasidas and colleagues (2004:138), after ten years' study of online course design, have also warned that *"There is no step-by-step approach that guarantees successful community building."*

In conclusion, therefore, it appears that opinion is divided regarding both the definition and means of formation of an online community. There is, however, one thing on which all authors agree – that the existence of an online community is not detrimental to the learners (Wenger, 1998; Wegerif, 1998; Vrasidas et al, 2004; Palloff & Pratt, 2007; Skinner, 2007; Shackelford & Maxwell, 2012).

As noted above, a number of authors (*eg* Rovai, 2002; Thompson & MacDonald, 2005) have suggested that interaction is a major factor in creating a learning community, and this will therefore be considered in the next section of my review.

2.4 Theme 3: Online Discussion & Interaction

Interaction within a class has long been posited as an key objective for instructors. For example, Woo and Reeves (2007:15) have proposed that *"One of the key components of good pedagogy, regardless of whether technology is involved, is Interaction"*. And indeed, Kanuka (2011) has further proposed that interaction is vital in order for learning to be achieved, commenting: *"it is the level of the interaction that will determine the quality of a learner's educational experience, whether it is face-to-face or distance and online education"* (Kanuka, 2011:154-155).

However, Goodfellow and Hewling (2005:358) have disagreed with the stance that interaction is the key to learning, complaining that *"Participation as a pedagogical synonym for learning has long been a key feature in the discourse of computer-mediated communication in education"*. Meanwhile, Woo and Reeves (2007:18) have clearly stated that *"social constructivists do not maintain that all conversation and discussion occurring anywhere anytime are meaningful for learning"* - a view which resonates with the neat division offered by Bliss and Lawrence

(2009:19) of 'Educationally Valuable Talk' (EVT) and 'Educationally Less Valuable Talk' (EVLTV). This further resonates with the comments of Rourke and colleagues (1999), noted above, when they identified online discourse in CoI as distinctly different from conversations held “*over the garden fence*” (1999:67).

However, even if not always directly generative of learning, I would suggest that all conversation and discussion is desirable, and can indeed be useful and, perhaps, even necessary, for example in supporting the development of a community. This idea is supported by the proposition of Social Presence in the Community of Inquiry (Garrison et al, 2000); and is further borne out by Rovai's (2002) suggestion that interaction is a major factor in creating a learning community.

Thus, although we cannot, and indeed should not assume that active participation equates to learning, nevertheless, interaction and the achievement of dialogue within the online discussion board can only be considered to be advantageous, and thus, also a major objective and challenge for the online tutor.

2.4a Quantity & Timing of Online Discussion

Furthermore, Palloff and Pratt (2000:7) recommend that “*Quality and quantity of participation should be a measure of overall student performance*”. And Mazzolini and Maddison (2003b) have offered advice on forum size (less than 30, but ideally more than 20), as a way to ensure that discussion flows at a comfortable pace, and without overwhelming students with too much reading on the one hand (*eg*: over 300 postings per fortnight), or the need for the instructor to post too many or frequent triggers on the other.

I concur with this position, although I would question whether the optimum group size may possibly be affected by study discipline, since a 'small' group (*ie* potentially challenging) in postgraduate astronomy (Mazzolini & Maddison, *op.cit.*) would seem to be smaller than 20 students, whereas from my own experience, in the field of postgraduate clinical education, I would suggest that a problematically 'small' group would be no larger than 8 in size (and usually much smaller), with 20 representing the outside of acceptable limits for an online discussion group. I am supported in this view by Palloff and Pratt (2007:82) who have likewise advised that running a 'large' asynchronous group (*ie* 'twenty or more') should only be attempted by a skilled online facilitator, whilst groups of fewer than 5 tend to struggle.

Similarly, Qiu and colleagues (2014) also found that small groups of 4-6 students required far more work overall and more individual input from both the students and the tutor, compared to a slightly larger group. However, it is also interesting to note that in other recent work, Kim (2013) has defined 'small' groups as numbering 25-30 for an introductory gerontology class, noting that they interacted more, and indeed more meaningfully, in online discussion than 'whole class' discussions involving a staggering 138 students. Unsurprisingly, Kim (2013:129) argues for some level of instructor control over student numbers, '*proper class sizes*' and '*small group exercises or projects*' in order to achieve a quality learning experience. I shall return to discuss group size in relation to my own study data, in Chapter 5.

Hewitt (2003, 2005) has observed a tendency in online discussants to concentrate almost exclusively on unread postings, which he suggests is significant in the flourishing, and also in the ultimate death of discussion threads. Thus, the quantity of postings made to the discussion board can be an influential factor - the more unread postings on any given day, the greater the likelihood of achieving an ongoing dialogue. A possible tendency to concentrate on unread postings may also indicate the importance of time-scale in online discussion – if all postings are made within a short space of time, then participants will be more likely to remember the whole of the developing argument, and will therefore be in a position to respond to all facets of the debate; whereas if the time-frame is longer (for example, over a number of weeks), then participants will be less likely to maintain a full over-view of the dialogue, and will respond only to the most recent comments. Hewitt and Teplov (1999) further proposed that as little as 2 days' inactivity within a discussion thread can be sufficient to kill the discussion off – a somewhat extreme view. However, in contrast, Jeong (2004), investigating the significance of message content and response times, found that certain message types, such as critique, always take longer to formulate, but yet still keep the discussion going. Thus, it appears that opinion is divided regarding influences on the generation of ongoing dialogue.

2.4b Structured discussion activities

Dennen and Wieland (2008) also found that the type of task was influential on participation, with some tasks (such as a film critique) encouraging instructor-facing 'essays' rather than discussion with peers; and they have therefore advised instructors to design tasks that “*create a greater need for learner interdependence*” (Dennen & Wieland, 2008:122). They also argue for explicit clarity of purpose if students are to feel sufficiently confident to engage with any given task. Not surprisingly, a reduction of posts has also been observed when students don't

understand the topic discussed, or if they feel intimidated by the other students in the class (Vonderwell & Zachariah, 2005).

Structured tasks have also been identified as significant by Gilbert and Dabbagh (2005), who found that simply providing facilitator guidelines for student peer facilitators increased both the number and type of student facilitator postings, thus also engendering an increase of meaningful discourse. Interestingly, this resonates with another finding of Vonderwell and Zachariah (2005), that asking students to volunteer for specific roles [Facilitator, Reflector or Summariser] had an influence on overall levels of participation, with student facilitators also reporting a significant impact on their learning – a point further borne out by the later findings of Hew and colleagues (2010). Similarly, Du and colleagues (2005) claimed evidence of deep learning arising out of a three-tiered structure for online discussions, formally dividing activity into Flexible Peer Discussion, Structured Topic Discussion and Collaborative Task Discussion. However, Gilbert and Dabbagh (op.cit.) found that '*overly structured protocols*', even seemingly simple requirements such as limiting the length of postings or mandatory citations, had a negative impact on meaningful discourse. This further resonates with Moore's (1991) proposition that dialogue and structure are inversely related; and also with the advice given by Palloff and Pratt (1999:18) that "*guidelines that are too rigid will constrain discussion, causing participants to worry about the nature of their posts rather than to simply post*". Thus, students focus their energy on complying with the tutor's detailed and specific requirements for the task, rather than on engaging with the content of the task itself – a point further supported by Goodyear and Ellis (2007) when they explored students' interpretation of learning tasks. It seems, therefore, that online learners can be expected to need some level of structure to the course, but not to be unduly constrained in their activities.

2.4c Student roles: formal and informal

An aspect of structure on which opinion seems to be particularly divided, however, is the extent to which the roles acted out by students should be formally assigned, or whether peer facilitation should simply be allowed to develop spontaneously. Hew and Cheung (2008) have favoured the formal assignment of the role of '*facilitator*' but without controlling or structuring facilitation practice, identifying students learning facilitation techniques as an additional overall benefit.

Baran and Correia (2009), however, claim to have achieved notable success in online interaction and co-construction of knowledge when graduate education students took on the facilitator role voluntarily, also choosing their own facilitation style. However, Wang and Chen noted significant success in online discussions where students had the freedom to engage in '*spontaneous facilitation*'. Keeping the learners' facilitation role informal, and perhaps even implicit, also resonates with my own experience (Sherratt & Sackville, 2006a), as well as that noted by Mazzolini and Maddison (2003a). It might be argued, indeed, that there is a different dynamic when students take on the facilitation role naturally, rather than as an obligation.

Waters (2012) refers to influential students who have an entirely informal role as '*thought leaders*', whose presence is identified as having a positive impact on students' learning experience. He has taken the somewhat unusual approach of asking the students themselves to nominate whoever they felt should have the title 'thought leader' after the course had ended. Waters (2012:32) has further recommended instructors to "*gently encourage potential thought-leaders*" as a strategy for improving engagement and the learning experience.

In a similar vein, Murphy and Loveless (2005) have discussed the insights yielded from student self-assessment of their own discussion board postings, including their contribution to developing argumentation, at the end of a course. This, they report, has an impact on student understanding of interaction and behaviour in subsequent courses. Inviting students to engage in this type of additional reflection is an interesting extension to more standard forms of module evaluation, although not, as yet, widely implemented.

2.4d Levels and types of participation

As noted by Du and colleagues (2005), above, online learning activities and participation can take a variety of different forms. Moore (1989), an early proponent of this distinction, identified three different types of interaction, namely: learner-learner, learner-instructor, and learner-content. He further argued that instructors must take account of, and plan to utilise all three types of interaction when designing online courses. This proposition is supported by Anderson and Garrison (1998) in their discussion of Transactional Relationships in higher education, which further resonates with my own experience, even though their addition of instructor-instructor and content-content interactions are somewhat less convincing than Moore's (op.cit.) basic three types, and also seem to take place outside of the course context.

CHAPTER 2: LITERATURE REVIEW

Interestingly, Ziegler and colleagues (2006) describe online interaction in terms of an '*overarching framework of engagement*', and posit notions of four different types of 'engagement', namely: *engaging in the online environment*; *engaging in dialogue*; *engaging as a group*; and *engaging in the course content*.

Meanwhile, Sheard and colleagues (2003) also explored engagement, characterising this as either pro-active or reactive. Interestingly, they found that the greatest influence on the development of learning communities and pro-active engagement on the part of students was their level of maturity, with first year students exhibiting less overall engagement and also higher levels of reactivity than third-year undergraduates or graduate students. Likewise, Benson and Samarawickrema (2009:15) have distinguished between learners in '*the early years of a course*', where they claim a highly structured approach to online tasks is needed, as compared to the communities of practice of '*more mature learners with higher levels of autonomy*' for whom "*much of the dialogue involves social construction of knowledge through learner-learner interaction*". One wonders, however, whether these authors are necessarily observing the effect of maturity, or whether it may simply be that, as Arbaugh (2004) has argued, students need to take at least two online courses (*ie* modules of a programme) before they settle into the style of interaction needed for successful online study. And indeed, he has therefore also advised that "*degree programs should provide focused attention to first-time online learners to encourage their participation in subsequent online courses*" (Arbaugh, 2004: 169) to further assist students in making this transition.

Meanwhile, Cheung and colleagues (2008) have also identified Relational Capital as a key component of active participation within a student-owned online forum, most especially the feeling of obligation and reciprocity towards peers. Similarly, O'Reilly and Newton (2002) identified an important benefit of online interaction as providing support and motivation to fellow students. This is especially interesting when we consider Vonderwell's (2003:83) finding that "*students who initiated collaboration messages were frustrated since their messages were often left unanswered by their peers*". It would appear, therefore, that experiences of online interaction can differ quite markedly.

Anderson (2003), meanwhile, has posited an equivalence theorem, suggesting that a dearth of one type of interaction can be compensated by more interaction of a different type, without adversely affecting the overall learning experience. The implications of this are discussed in relation to my own data in Chapter 5.

Earlier, Hammond (1999:354) had described what he called “*three patterns of on-line participation*” which he identified as 'non-participation', 'quiet participation' and 'communicative participation', with communicative participation identified as necessary for discussion to flourish - although clearly only the category identified as communicative participation would actually count as 'engagement' or 'interaction' for many other authors (Moore, 1989; Anderson & Garrison, 1998; Ziegler et al, 2006). And in a similar vein, Bento and colleagues (2005:80) described a four-stage “*Taxonomy of Online Participation*”, where only the fourth classification, “*Active Learner*”, was considered satisfactory in terms of interaction both with course content and with fellow participants.

2.4e Forced participation versus silent learning

Opinion is clearly divided regarding what counts as participation in an online course. It is interesting to see that Hammond's (1999) three classifications of 'participation' re-appear with different labels in Taylor's (2002) distinctly pejorative definitions of '*lurkers*', '*shirkers*' and '*workers*', with 'lurkers' being inactive participants (also described as 'Peripheral Participants'), 'shirkers' being strategically active with low participation levels ('Parsimonious Participants'), and 'workers' representing the ideal student ('Proactive Participants'). It is interesting to see that Taylor noted, however, that whilst the 'workers', as might be expected, achieved the best grades for the course, they were closely followed in their achievement by the 'lurkers', which he has suggested is indicative of Legitimate Peripheral Participation (Lave & Wenger, 1991).

Furthermore, Beaudoin (2002) has warned that tutors should not assume that low *participation* in discussions necessarily equates to low *engagement* in the course or indeed in learning, further adding the caveat that:

“it could be argued that the “overactive” online students (i.e., those who are constantly inputting words) do so at the expense of a more reflective and less visible learning process in which their silent peers are actually more fully engaged”
(Beaudoin, 2002: 153)

This construction of online silence resonates with the proposition of Zembylas and Vrasidas (2007), who offer “*silence as thoughtful reflection*” as one of four potential explanations of such behaviour [along with non-participation, confusion and marginalisation].

Thus, Beaudoin (op.cit.) does not advocate 'forced participation' in discussions, simply to make 'invisible' students visible to tutors. Likewise, Xie and colleagues (2006) noted that mandatory participation acted as a de-motivator for students, who felt their autonomy as learners was compromised; and Taylor (2002) also noted that those students whose participation was 'parsimonious' and strategically compliant were at considerable risk of not completing the course, which therefore indicates a further potential problem with forced or mandated participation. Likewise, Davies and Graff (2005) also noted that students who failed their course had interacted less frequently than those who passed, highlighting opportunities for support as well as learning.

However, Gulati (2008:188) has warned that although there may indeed be good reasons for requiring participation in online discussion, due to its positive impact on the learning experience, nevertheless *“Course designs that view observable participatory roles in discussion as learning, and silent roles as not learning, are using teachers’ power position to enforce conformity”*, thus denying choice and potentially ignoring individual students' learning styles.

However, as noted above, Zembylas and Vrasidas (2007) have warned that online silence may not always represent a conscious choice on the part of the participant, but could be construed as a form of exclusion or '*silencing*' of marginal views, and could also be caused by interpersonal influences from fellow students. This, then, argues for the need for moderators in an online forum. Anderson (2006), however, reminds us that students have power over their own engagement, and can choose which messages they respond to, or, indeed, even read.

Furthermore, Zembylas and Vrasidas (op.cit.) have also advised instructors to consider how different forms of silence may be used constructively within an online course – a little discussed and interesting challenge for the online tutor.

In clear contrast, however, Nagel and colleagues (2009), noted above, proposed that '*read-only*' participants destabilise the online community and thus should be avoided at all costs, further offering suggestions for tutors to mitigate against such online silence. This stance is further supported by Kao (2013) whose use of the emotive phrase '*free-rider*' is indicative of her strong attitude to unequal participation, and equally strong recommendation to tutors to avoid such an occurrence.

Thus, it appears yet again, that despite a wealth of reported research and theorising, opinion is nevertheless somewhat divided surrounding online interaction. A clear emergent challenge, however, is the role of the tutor and the actions required in order to achieve active participation from students. I shall therefore address tutor roles and practice in the next section of this chapter.

2.5 Theme 4: Tutor Roles & Practice

As noted in the introduction to this work [Chapter 1], there has been a substantial amount of material already published which offers guidance to practitioners regarding teaching in the online setting, be that in fully online courses or blended programmes. However, no consensus has yet been reached regarding the role that the online tutor should adopt, nor what might be classed as optimum practice in facilitating learning (Mandernach et al, 2006), with some authors apparently offering the exact opposite view of others. In this section, therefore, I will explore the literature relating to key challenges for the role and practice of the tutor, which can be largely characterised in terms of frequency, purpose and content of intervention or activity.

2.5a Frequency of Intervention

How frequently a tutor should post to an online discussion board is a point which is contested within the literature. Indeed, Blignaut and Trollip (2005a:7) have complained that *"very little empirical information is available on guiding online instructors as to how frequent interaction with learners should be"*.

However, as noted earlier, some authors have argued that tutors can influence both the engagement and interaction of students in an online discussion forum simply by the frequency with which they intervene. In particular, Mazzolini and Maddison (2003a, 2006, 2007) studied the frequency and timing of tutor intervention in an online discussion board, and its impact on ensuing discussion, proposing that this is a crucial factor in the success or failure of an online forum. In their early work, Mazzolini and Maddison (2003a:237) explored three different roles for the online instructor: the traditional *'Sage on the stage'*, where the tutor is a central figure, intervening frequently, leading and directing discussions; *'Guide on the side'* which they describe as a more 'constructivist' tutor role, encouraging students to interact with each other and not just with the tutor, and therefore leading to less frequent tutor intervention; or the lowest

CHAPTER 2: LITERATURE REVIEW

activity and lowest 'visibility' tutor role, which they refer to as a '*Ghost in the wings*', where the tutor takes no active part in online discussions.

From an analysis of the overall quantity of postings and the interaction between tutor- and student-initiated threads in the archives of 29 separate discussion groups from an online postgraduate astronomy programme, Mazzolini and Maddison (2003a) identified an inverse correlation, concluding that shorter discussion threads resulted when instructors intervened more frequently. This led them to pose the question: "*If long discussion threads indicate in depth discussion, does this indicate that instructors are best advised to keep as quiet as possible?*" (Mazzolini & Maddison, 2003a:245).

And although further analysis led Mazzolini and Maddison (2003a, 2006) to conclude that a better tutor role was actually the middle way, the '*Guide on the side*', nevertheless, the suggestion that instructors should stay out of online discussions is born out by An and colleagues (2009) whose analysis of discussion boards for trainee teachers found that students tended to reply to the instructor posting rather than developing their own interactions, whenever instructors posted frequent interventions. This finding is further supported by more recent work by Savvidou (2013), who also found an inverse relationship between the number of tutor and student postings.

Furthermore, An and colleagues (2009: 749) also noted that "*when the instructor's intervention was minimal, students tended to more freely express their thoughts and opinions*", and thus proposed that students may not 'appreciate' high levels of instructor intervention. Likewise, Poole (2000), Hew and colleagues (2010), Sackville and Sherratt (2006), and Light and colleagues (2000) also noted the greater feeling of 'freedom' introduced by student-facilitated discussion as compared to instructor intervention.

Similarly, Maurino and colleagues (2007:140), following scripted interviews with 30 online instructors, concluded that "*Most instructors appeared to feel that by participating in the discussion they were keeping students from becoming "active" learners*".

This further resonates with the work of Dixson and colleagues (2006), who also found nothing to recommend frequent tutor postings in an online undergraduate course on family communication. Indeed, they found that structured peer facilitation in collaborative group-work, rather than instructor facilitation, appeared to be an optimal instructional design, commenting:

“too much “shepherding” may inhibit learning” (2006:24). This study, however, was based on a course which was already highly and carefully structured, with clear expectations for participation on the part of all students, who were required to take turns in leading and facilitating discussion. Thus, I would suggest that it is possible that this is the reason for their finding and subsequent proposition that:

“the fact that nothing the instructor posted led to any significant difference in the quality of the group’s final answer leads us to wonder how important it is for the instructor to directly intervene in online discussions” (Dixson et al, 2006:24)

Similarly, Hew and Cheung (2008, 2011) and Wang (2008) have found that an entirely student-facilitated discussion forum can be feasible and result in student learning; whilst Sheard and colleagues (2003) found that differing levels of pro-activity on the part of the lecturer made no difference to levels of student engagement. It should be noted, however, that this proposition is at the extreme end of a spectrum, and appears not to be widely supported. In particular, the findings of Light and colleagues (2000), that students felt frustrated by a complete lack of tutor presence, are of relevance here. Interestingly, Painter and colleagues (2003) found that the least amount of tutor intervention produced the least productive discussion for groups of postgraduate language teachers, leading them to conclude that *“asynchronous tutorials are more effective with a greater degree of tutor intervention”* (Painter et al, 2003:171).

At the other extreme, Berge (1995) recommended that tutors should contribute between 25-50% of an online conference, responding to the group and to individuals as well. I would argue that this is a rather teacher-centred (or dominated) view of online instruction. However, it is not an isolated view, and resonates most strongly with the view of Schulte (2009), whose expressed belief that the instructor *“is the most influential component in the online classroom”* (2009:111), underpinned an intervention specifically designed to increase the quantity of instructor postings across her college. In explaining the rationale for introducing a college-wide instructor monitoring system, Schulte proposed that:

“The instructor who only logs into the online learning platform with no additional facilitation is no more helpful to his/her online students than a traditional face-to-face instructor who strides into the classroom, opens up a newspaper, and proceeds to ignore the students for the duration of the class meeting.” (Schulte, 2009:110)

This somewhat forceful analogy is useful in making the point that students expect some form of teaching from their instructor, a point which, in my opinion, is well made. However, it fails to take account of the online learning environment, which has some differences from a traditional

classroom – such as the way that the syllabus and learning materials are usually presented to students, and also the opportunities to learn from engaging in peer facilitation.

The analogy of the newspaper also indicates that Schulte (2009), in the absence of direct evidence to the contrary, has jumped to the (possibly erroneous) conclusion that a silent tutor is not reading the discussion postings and is doing other things rather than concentrating on the activities of students, whereas she could, in reality, be carefully monitoring their progress, and then making an active choice to say nothing. This further resonates with another finding of Mazzolini and Maddison (2003a, 2007) that tutors who posted frequently on the discussion board were perceived by students as being both more enthusiastic and also more expert than those who held back, a point further supported by the more recent work of Bogler and colleagues (2013). Similarly, 'lack of interest' on the part of the moderator is also cited by Hewitt (2005:574) as a possible reason for a discussion thread to die; a point supported by the findings of Xie and colleagues (2006). The possibility for misunderstanding the quieter tutor arises from the lack of actual evidence, which does not, therefore, make the intentions of the instructor clear. Blignaut and Trollip (2003b) further concur with this point, explaining that:

“An instructor who is physically in a traditional classroom is perceived as being present, even if he or she is silent. However, being silent in an online classroom is equivalent to being invisible”.
(Blignaut & Trollip, 2003b:347)

This, then, could be perceived as a potential difficulty for those tutors espousing the '*Ghost in the wings*' approach to online facilitation.

2.5b Purpose of Tutor Activity/Intervention

DeLoach and Greenlaw (2007:420) have reminded us that *“To moderate discussions effectively, the instructor needs to know when and how to intervene. Before this can be done, the moderator must have a clear understanding of why intervention is necessary and what he or she hopes to accomplish with the intervention”*. Thus, I will now address literature relating to the purpose of tutor intervention and activity.

In addition to frequency, roles such as '*Sage*' or '*Guide*' can also imply a difference in purpose for tutor interventions (Arbaugh, 2010), which might, for example, be directive, informative, motivational or collaborative, each requiring the tutor to behave in a different way. These differing purposes can be seen to relate to the pedagogic beliefs and values of the tutor. For

example, Moore (2013:69) has suggested that highly-structured programmes and interventions reflect a more behaviourist attitude, whereas more flexible, learner-centred approaches reside in the humanist or constructivist paradigms.

Bergström (2010), exploring the impact of power-relationships between tutors and students in a group of Swedish nursing undergraduates, noted that students expected the tutor to initiate activities. He also found that some students were uncomfortable when faced with a different pedagogic approach than that which they had experienced previously (and were therefore expecting), commenting:

“In terms of the teacher’s role, the power relationship shows more openness than authoritarianism but also reveals greater demands on the student to take responsibility for his or her own learning.”
(Bergström, 2010:46)

This suggests that students need to understand the intentions of the tutor, such that they can arrive at a shared understanding of the role and purpose of tutor intervention, especially when the tutor adopts a constructivist or non-directive approach.

Furthermore, Rovai (2004:81) also posits the view that when instructor roles change from *"Expert, source of understanding, lecturer"* in the traditional learning environment to the constructivist instructor roles of *"Collaborator, tutor, facilitator, encourager, community builder"*, then the concomitant student roles must also change from the traditionally *"Passive, listener, consumer of knowledge, note taker"* to *"Active, collaborator, constructor of knowledge, self-monitoring"* in the constructivist learning environment. Such a marked change of expectations regarding behaviour and relationships needs to be clearly explained and signposted to students. Dennen (2007:105) concurs with this proposition, suggesting that *"How well students receive instructor actions may well be related to the intentionality of instructor positioning"*, further proposing that tacit acts on the part of the tutor may go unnoticed.

Clarity of purpose is also important for Savery (2005). Analysing the functions of the online tutor, he proposed the acronym 'VOCAL' [*Visible, Organized, Compassionate, Analytical, and Leader-by-example*] to identify the various strands of the tutor's role (Savery, 2005:141). This also acknowledges the need for tutors to be active online, so that students can 'see' them, but further identifies a new aspect of the interaction – Compassion, recognising the unexpected intimacy which characterises much online interaction. This can be seen to resonate, perhaps, with some of the social presence elements of CoI (Garrison et al, 2000). However, the 'VOCAL'

acronym also indicates a somewhat directive role for the online instructor (in both the 'organized' and 'analytical' elements), in addition to the leadership function.

For Xin and Feenberg (2006), likewise, the purpose of intervention is primarily leadership. They question whether remaining on the sidelines can truly be effective in achieving educational goals, and thus argue that the tutor should not be a '*Guide on side*', but rather, should be actively engaged in discussions. This also resonates with the finding of Bogler and colleagues (2013:386) that "*students react more to the instructor's level of involvement rather than to the type of motivation that generated it*". Rovai (2007:87) goes even further, claiming that "*Good discussions require good discussion topics. The first message in each discussion forum should be a focused discussion topic posted by the instructor*".

Nevertheless, Xin and Feenberg (op.cit.) also point out that the leadership role does not automatically imply authority for the teacher, and can be shared, further suggesting that "*discussion classes work best when many participants lead in small ways under the general direction of the teacher*". (Xin & Feenberg, 2006:18). This contrasts strongly with the views of Bogler and colleagues (2013), discussed earlier, that leadership is the domain of the tutor, with students being designated as '*followers*'. In contrast, Davis (2009) theorised that the most appropriate strategy for online instructors would be the 'Situational Leadership' model originally developed by Blanchard and colleagues (1993), which varies in directiveness depending on the needs and stage of development of the learners. This approach can also be seen as 'scaffolding', which will be discussed later in this chapter.

In a similar vein, but based solely in the face-to-face classroom, Grow (1991) also identified different levels of tutor directiveness, which he matched with differing levels of self-direction in students. The 'Staged Self-Directed Learning' Model (SSDL) (Grow, 1991) is shown in Figure 2.8 [overleaf].

The teaching examples cited in Grow's (1991) model are clearly based in, and indeed many are only appropriate to, the face-to-face context for which the model was designed. It is possible, however, that the underpinning concepts may be transferable to the online context; and it is particularly interesting that 'guided discussion' is offered as an early strategy, but 'facilitated discussion' does not appear in Grow's SSDL model until students have reached Stage 3 – *ie*: they have already become reasonably self-directed. In the online context, this, then, may further

support the notion of 'scaffolding' interventions on the part of the tutor, which will be addressed later.

Stage	Student	Teacher	Examples
Stage 1	Dependent	Authority Coach	Coaching with immediate feedback. Drill. Informational lecture. Overcoming deficiencies and resistance.
Stage 2	Interested	Motivator, guide	Inspiring lecture plus guided discussion. Goal-setting and learning strategies.
Stage 3	Involved	Facilitator	Discussion facilitated by teacher who participates as equal. Seminar. Group projects.
Stage 4	Self-directed	Consultant, delegator	Internship, dissertation, individual work or self-directed study-group.

Figure 2.8: SSDL Model (Grow, 1991), reproduced with permission.

Law and Nguyen-Ngoc (2009) also compared proactive and reactive facilitation strategies, in a cross-cultural international study of online learning. However, despite noting that students who had contact with the most active tutor all achieved good or excellent grades, nevertheless, overall they “*did not find any significant correlation between the facilitators’ activeness and the students’ performance*” (Law & Nguyen-Ngoc, 2009:328).

For Lim and Cheah (2003), however, based on research with over 250 trainee teachers, the purpose of tutor intervention is actively and necessarily directive, to keep students focused on the subject, and also to answer students' queries and provide expertise. Furthermore, they noted that students found it difficult to stay focused on the topic and could get lost, without active tutor direction.

However, Wang and Chen (2010) found that a similar, albeit smaller, group of graduate students were indeed able to take responsibility for facilitating online discussions, with the tutor staying 'behind the scenes' and taking a purely monitoring role throughout the course. They also noted that meaningful learning occurred, in addition to power being transferred to the students, who acted autonomously and supported each other.

CHAPTER 2: LITERATURE REVIEW

Vlachopoulos and McAleese (2004) explored the directiveness in tutor interventions, analysing the impact of two contrasting tutor styles, which they identified as either non-directive ('Low') or directive ('High'). They concluded that a much higher level of discussion postings resulted from the directive intervention style, but also noted the less satisfactory possibility that a directive instructor might steer students towards a solution, based on his own expertise, rather than allowing students to solve a problem for themselves. This resonates with the specific recommendation from De Loach & Greenlaw (2007:432) that:

"moderator comments should be limited to helping students make the transitions associated with increasing cognitive complexity rather than leading them to predetermined answers."
(De Loach & Greenlaw, 2007:432)

In addition, Vlachopoulos (2009:9) warned of an additional risk, that students may lack the skills to 'resist' the tutor's directions. Interestingly, all of these findings can be related back to earlier work by Garrison and Baynton (1987), in the context of distance education at a time before the VLE was a widespread tool, which identified 'control' as a key determinant, both of success and satisfaction, noting particularly the interplay of power with independence and also with support. This concept will be considered further in relation to my own data, in Chapters 5 – 6.

In the online context, Vlachopoulos & Cowan (2010a:222) posit the notion of a 'Rescuing' intervention, whose purpose is "*Avoiding disaster for a group which is obviously floundering*". However, I would suggest that this type of intervention needs careful consideration on the part of the tutor, to ensure that such interventions are not overly authoritative and that the discussion does not become necessarily tutor-focused, and I therefore concur with the warning of Vlachopoulos and Cowan (ibid.) that it could lead to general tutor-dependence on the part of the students. This perspective resonates strongly with the views of Gerlock and McBride (2013), who caution that a rescuing intervention on the part of the tutor may not only lead to tutor-dependence, but also to an enactment of the 'Drama Triangle' (rescuing, victim, and persecutor behaviours), which impacts negatively on any sense of community.

Similarly, Hopkins and colleagues (2008:39) also noted that online "*tutors face the dilemma of when to intervene and when to step back and allow learners to assume control of the online discourse*". However, somewhat disappointingly, they did not identify any new solutions to this problem, nor new avenues for research, but merely a bland recommendation that more research should be carried out. However, Henderson (2007:171) made a definite proposition, that tutors

should intervene “*only when the rhythm of participation is at risk*”, further proposing that “*in order to achieve this supportive culture the participants need to feel that their participation is important*” and crucially, that students should “*feel accountable to each other*”.

The extent to which the instructor has control within the context of online discussion is a key feature for McWilliam (2008), who has argued that optimum results would be achieved by the tutor adopting a new role, that of ‘*Meddler in the middle*’. This is a non-directive tutor role which seeks to balance out the power relationship, requiring tutors to contribute regularly to discussion boards, but in the guise of peers, to share ideas and co-construct understanding with their students.

In a similar vein, Poscente and Fahy (2003) have also suggested that it may be possible for moderators to act as role models in the online discussion forum, such that students respond by mirroring their observed online behaviours. Palloff and Pratt (2007:21) refer to a similar idea, albeit possibly with slightly more authority attached to the role, describing it as “*modelling the methodology*”, explaining that this means the facilitator is “*acting as a group member who is contributing to the learning process*” (Palloff and Pratt, *ibid.*).

This proposition further resonates with the views of Parsell & Duke-Yonge (2007) who comment that online instructors must be prepared to give up their role as ‘teacher’:

“The instructor in a community of enquiry must become a peer to the students; a more experienced, but nonetheless equal member of the community who facilitates exchange and acts as a model of an open, respectful thinker”.

(Parsell & Duke-Yonge, 2007:189)

Similarly, Vandergrift (2002:83) proposed ‘*Restrained Presence*’, whereby faculty members participated in discussions, but did not intervene as an authority figure. The stated purpose of such intervention was to enhance student interaction, thus encouraging them to turn to each other for feedback and leadership, rather than always focusing on the tutor.

However, we should be aware that students may not always feel comfortable with this autonomy and power. For example, a student commentator complained of a “*paucity of active input from tutors*” (Networked Learning Community CPD461, 2008:5), based on the fact that substantially more ‘triggers’ were posed by students than by tutors. This indicated an expectation of a tutor-led module, whereas the tutors had been delighted to see the students becoming more self-directed in their learning, rather than remaining reliant on tutors to push forward their

understanding. Thus, it appears that tutors need to ensure that all participants have a shared understanding and expectations in order to achieve a successful learning experience. It may also resonate with the finding of Baran and Cagiltay (2010:90) that “*community members’ readiness for life-long learning was a very important motivator*”.

An interesting alternative solution was expounded by King (2002), and further developed by Blignaut and Nagel (2009), when they created a fictitious student persona for the facilitator to use, in addition to his or her own instructor identity, thereby reducing the 'authority' of some interventions, and also capitalising on the benefits of the motivating dynamics of 'peer' facilitation. For the workload to be manageable, however, Blignaut and Nagel (2009) have recommended that the virtual student persona should not be undertaken by a single group facilitator working alone, but rather, that it might offer scope for shared facilitation.

It should be noted that although neither McWilliam (2008) nor Parsell and Duke-Yonge (2007) had tested their theorising with empirical research, other authors did present evidence from original research (Vandergrift, 2002; Wang & Chen, 2010; King, 2002; Blignaut & Nagel, 2009), which supports the feasibility of these non-directive theoretical approaches in practice. On the other hand, Lakkala and colleagues (2005:295) found that when a tutor took part in discussions as a 'co-inquirer' in an undergraduate psychology course, rather than as a content expert, the resulting discourse was “*a dialogic and idea-rich discussion, but not very deepening or focused on theory building*”, which suggests a level of disappointment in outcome of the learning process. However, they found that tutors had successfully “*managed to transfer responsibility for the discourse to the students*” (Lakkala et al, *ibid.*), which resonates more positively with the propositions of Vandergrift (2002) and McWilliam (2008), outlined above.

Meanwhile, Hartley (2013) has also proposed an additional role for the online tutor, that of 'Decoder of Mystery', whereby the tutor should be responsible for identifying things that students find difficult. These 'Threshold Concepts' (Meyer & Land, 2005) are the things that transform students into members of a particular profession, and are thus entirely crucial to successful learning within that discipline. Therefore, Hartley argues, identifying and explaining these challenging areas is a vital role for the modern tutor. Whereas Palloff and Pratt (1999:36) and Andresen (2009: 251) proposed that the online tutor should take on the specific and very different role of '*Cheerleader*', aiming to encourage and motivate students to actively participate in the online discussions.

Similarly, Koh and colleagues (2010) found that students felt that the role of the instructor should be that of motivator, although they also included facilitator and guide, and an acknowledgement of the tutor's responsibility for designing learning activities. Likewise, Goodyear & Ellis (2007:340) also proposed that *“the biggest difference a teacher can make is through careful planning: through ‘teaching-as-design’.”*

In contrast, a study by Aydin (2005), serves as a reminder that not all university courses have the same structure, and thus, tutors with responsibility for facilitating discussion may not also hold the role of course director or content designer. This was indeed the case in his study of Turkish undergraduates, where the role of group 'mentors' for online discussion was taken by graduate teaching assistants, who therefore felt that neither planning nor design were relevant or important to their facilitation role.

Bradley (2010), however, posits the view that the role of the online tutor is firstly one of instructional design, to ensure that the question is worded appropriately, in order to invite higher-order thinking, and secondly one of regular intervention in discussion, with the specific purpose of promoting conversation and constructing new knowledge. Furthermore, she comments that *“The skill of the facilitator is integral to achieving successful outcomes.”* (2010:28), making a direct link between a dearth of learning in a given case study and a lack of skill and experience on the part of the tutors.

It is interesting to compare the views of Dixson and colleagues (2006) and Wang and Chen (2010), discussed above. Both concur with Bradley (2010) on the importance of the design role for the online tutor, but strongly disagree on the need for active tutor intervention. Thus, it appears that the purpose of tutor activity and intervention remains particularly contested and unclear, and I shall therefore return to this point during the analysis of my own data [Chapters 5-7].

2.5c Content of Intervention

The way in which a tutor intervenes is also discussed by a number of authors as a significant factor. For example, Reingold and colleagues (2008) identified four different types of support provided by the instructor, in an online teacher-education programme, which they describe as 'vital' to the learning process: technical; content-centred; procedural; and finally, meta-cognitive. They claim their study offers *“strong empirical evidence to support the relationship*

between instructor's scaffolding and students' reflective and metacognitive processes", and they further claim that *"An appropriate instructor response can turn the course into a learning environment in which students would experience learning through reflective and metacognitive processes"* (Reingold et al, 2008:147). However, despite indicating an expectation of high levels of direction in online tutor intervention, they do not explain what an 'appropriate' instructor response might be.

Similarly, Guldberg and Pilkington (2007:70), seeking to establish dialogue and reciprocity in a group of undergraduates studying Autistic Spectrum Disorder, found that *"the type of question posed to students has an impact on subsequent discussion patterns and leads to particular types of contributions from students"*. In particular, they found that questions which lacked specific focus and simply invited reflection on experience tended to produce a series of 'monologues' rather than interactive dialogue. This finding is further supported by the work of Whipp and Lorentz (2009), who noted that challenging, probing and targeted questions were closely related to high end course grades; commenting also that broader open-ended questions tended to produce 'rambling' dialogue and tangential postings.

Furthermore, Gerber and colleagues (2005:26), seeking to develop critical discourse in postgraduate trainee teachers, identified two extremes for the content of tutor intervention, one being merely *"supportive and informative"*, with the other *"challenging students to articulate and defend their positions in different contexts"*. They found that a challenging stance from the tutor was always productive of more referencing on the part of their students, and also impacted on the students' production of reasoned arguments, especially in less complex topics. However, they also found less effect for challenging interventions when the discussion topic was complex, which they attributed to a need for scaffolding – a point which will be discussed later in this chapter.

Likewise, Celentin (2007), in a study of trainee language teachers, found that both interaction and the achievement of critical thinking were *"influenced by the kind of input given by the tutor"* (2007:54), thus proposing that tutor intervention should be both frequent and *"technical"* in nature, pushing students to build on the postings of others, in order to achieve high levels of learning. In contrast, Lim and Cheah (2003) have recommended that tutors provide content expertise within their interventions; and Vlachopoulos and Cowan (2010b:29) have similarly described a tutor whose original aim, to run an online course utilising a non-directive 'problem-based learning' (PBL) style, was *"set aside"* in the face of his own pedagogic belief in the

CHAPTER 2: LITERATURE REVIEW

instructional role of the teacher, thus changing to giving solutions to problems, based on his subject expertise. This resonates with the notion of 'direct instruction' in CoI (Garrison et al, 2000) discussed earlier in this chapter; and furthermore supports the view of Nkonge & Gueldenzolph (2006:42), that *“instructors primarily engage in practices that are reflected in their beliefs when delivering online instruction”*.

It should be noted that these findings clash with the work of Joyes (2009b:58), who found *“apparent differences between espoused beliefs about teaching and learning and actual practice or enacted beliefs”*. Similarly, Mazzolini and Maddison (2007) found that tutor postings were predominantly informative in nature, answering students questions; whereas the tutors themselves acknowledged that a more effective strategy would be asking questions, or replying to questions with questions.

The use of questioning as a major style of tutor intervention is also supported by Coppola and colleagues (2002) who found from interviewing online instructors that they embraced the role of *“a kind of a “Digital Socrates,” which shifts from conveying information to raising questions and engaging in dialogue”* (Coppola et al, 2002: 186).

A number of different types of questions were identified by Murphy (2004a: 429), each of which could result in a different type of response: *“rhetorical questions, questions asking participants to elaborate or explain, requests for feedback on what the participant has just posted, and questions designed to provoke thought and discussion”*, although it should also be noted that these different question types are equally applicable to peers' as they are to tutors' interventions. Furthermore, the need for questioning interventions on the part of the tutor is also supported by Lisbôa & Coutinho (2012), despite their acknowledgement of the usefulness also of peer facilitation. However, Blignaut and Trollip (2005a) noted that social presence usually dominates in online discussion, rather than any form of cognitive exchange, a finding also supported by Murphy (2004a).

Interestingly, work by Baynton (1992:29) had already indicated that teacher support in the distance learning context could be divided into *“psycho-social”* and *“academic”* interventions. This proposition clearly resonates with later notions of online support from CoI, discussed earlier in this chapter (eg: Garrison et al, 2000; Blignaut & Trollip, 2003a), as well as with the idea that tutor interventions may be characterised according to their content.

2.5d Scaffolding Intervention

A number of authors have proposed that tutors should 'scaffold' online discussions (eg: Gerber et al, 2005; Davis, 2009; Motte, 2013), providing higher levels of support at the start, but changing their interventions over time in response to students' gains in confidence and/or competence, and thus potentially impacting on the frequency, purpose (especially directiveness) and content of intervention. For example, Kamin and colleagues (2006) noted this behaviour in facilitators of online PBL groups for medical undergraduates, whereby instructors reduced both the directiveness and frequency of their input over time. However, they did not identify what indicators might be used by the tutor in making this decision, other than getting to know the students. Whereas Connolly and colleagues (2007:50) noted that tutors of business education students needed "*more input in the early stages to foster trust and develop confidence*", and this was identified as an instructional strategy for online discussion, although students in that programme were also specifically encouraged to develop their own pedagogy.

In contrast, Giddings and colleagues (2006) identified a staged progression for students new to online learning, from 'virtual paralysis' at the start, through 'engagement' and 'getting into it', to 'surprised enjoyment' after a period of 4-6 months' study. They also identified the need for tutors to offer a structured transition for these students, being permanently 'on call' to offer almost instant responses while the students were in the initial 'virtual paralysis' phase, but setting boundaries and becoming increasingly more remote (eg responding to emails only on a specified day of the week), by the time students had progressed to the later phases of online learning.

A well-structured approach to scaffolding online interventions has been proposed by Salmon (2000, 2003, 2011), who has argued that the tutor's main goal is to engage the participants "*to enable "meaning making" rather than content transmission*" (Salmon, 2003:52). Thus, she developed the 'Five-stage model' (Salmon, 2000), shown in Figure 2.9 (overleaf), to guide the practice of 'e-moderators' as they moved through the different stages of scaffolding, to allow learners to construct understanding.

From the size and shape of the steps in Salmon's model [Figure 2.9, overleaf], it can be clearly seen that as students move from stage to stage, interaction increases, and tutor intervention (e-moderating) decreases. As a staged model, which moves from a more dependent to a more independent view of learning, a certain resonance may be noted with Grow's (1991) face-to-face

SSDL model, discussed above. It is, perhaps, significant that, as with Grow (1991), Salmon's (2000) 5-step model was developed in a time when the use of technology was less well-embedded in society as a whole, and also when online technologies, such as the VLE, were less well streamlined for use as a learning tool (Salmon, 2007).

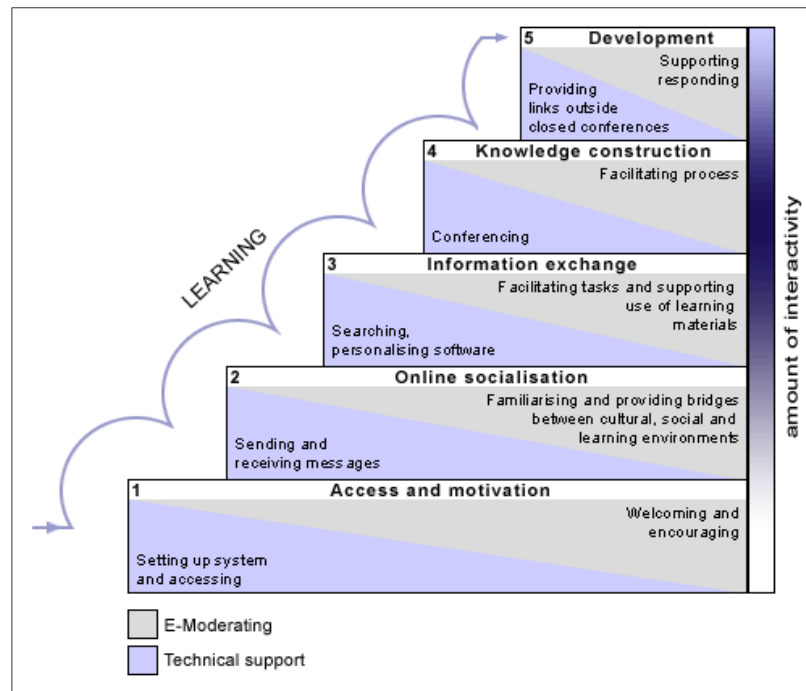


Figure 2.9: Five-stage model (Salmon, 2000), reproduced with permission

Thus, although the guidance for instructors has been revised to accommodate a range of newer technologies (Salmon, 2011), I would still question the necessity (and indeed efficacy) of expecting students to undertake a linear progression, when modern technology and constructivist pedagogy allow for more flexibility. In this, I am supported by Joyes (2009a) who has argued for the importance of a pedagogic approach to online teaching which does not assume that all the learners need to progress together through a fixed set of stages for effective learning to occur. Similarly, Swann (2010:51) has argued that “*A non-linear model may be more realistic*”.

Despite these reservations, however, I acknowledge that Salmon's (2000) 5-stage model is almost certainly the best-known and most influential e-learning model to emerge to date - to the point where Moule (2007) has complained that it has, inappropriately in her opinion, become the dominant discourse for the field. Moule's (2007) complaint centred around the fact that Salmon's (2000) model is clearly situated in a group-learning online context, whereas, as Moule

has argued, learning may also take place in isolation. In this, she is supported by Vlachopoulos and Cowan (2010b) who have further commented that:

“the general transferability of the model and its pedagogy to e-moderation, in differing contexts and with different purposes for discussion, has yet to be established”
(Vlachopoulos & Cowan, 2010b:24)

Thus, Moule (2007) proposed to replace Salmon's 5-step staircase design with a 6-rung 'e-learning ladder', to accommodate instructivist and individual learning at the lower end, as well as constructivist group learning at the top (Moule, 2007:41). This model is shown in Figure 2.10, below.

Whilst agreeing with the importance of communities, placed by Moule (2007) at the top of the ladder, I would argue that placing 'discussion board' activities only half-way up the continuum towards constructivist learning denies a powerful opportunity for collaborative learning, such as that explored earlier in this chapter, with the CoI (Garrison et al, 2000; Garrison & Anderson, 2003).

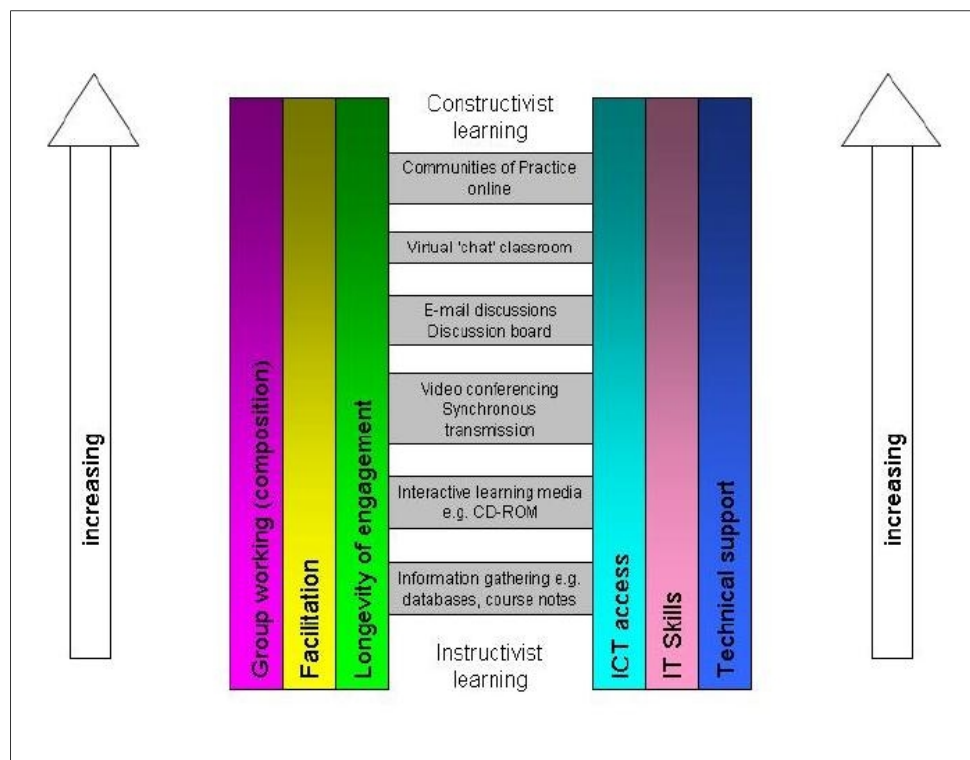


Figure 2.10: e-learning ladder (Moule, 2007), reproduced with permission

Furthermore, I am unconvinced by the sides of 'e-learning ladder' indicating an ever-increasing level of support and 'facilitation' as the online learner moves towards constructivist group learning. I would suggest that there is a need for clarification regarding whence such support might come. It may be that Moule (2007) intended some element of peer support in addition to tutor guidance, but this is currently uncertain. If tutor-dependent or even tutor directed e-learning is proposed, then this could be detrimental to the best use of the collaborative learning opportunities that exist within the online learning context.

2.5e Identifying Excellence in Online Practice

Interestingly, Diaz and Entonado (2009) asked whether the functions of teachers are really different in face-to-face or online learning environments, concluding that there is, in fact, no real difference. This also resonates with much earlier analysis from Mason (1991), who commented that:

"it seems apparent that excellence in online moderating is fundamentally no different from excellence in other forms of teaching: enthusiasm and involvement; intellectual perception and insight; ability to model an understanding of the subject matter".

(Mason, 1991: para 45)

However, whilst no-one would question these generic strengths, I would argue that this does not fully capture the essence of online teaching, and thus also the essence of online excellence, since it fails to take account of the specific affordances of the online context, such as the opportunity for interaction.

Indeed, as Heckman & Annabi (2006) have pointed out, one of the major differences between a face-to-face classroom compared to asynchronous discussion in the online environment is that all students can have the opportunity to answer each question (and can even be required to do so) online, whereas in the face-to-face discussion, time constraints and the need for '*turn-taking*' (Garrison, 2006:25) usually permit only a few students to offer an answer to any given question. This, then, has significant implications for pedagogic practice, as well as for the learning experience; and thus, we need to continue to explore the role of the online tutor, to gain a fuller understanding of what can be defined as best practice in this context.

2.6 Summary

From this review, it is clear that a considerable corpus of useful and insightful research has already been carried out in relation to instructor roles and the impact of tutors on learning and learners' experience in the online environment. However, as Mandernach and colleagues (2006) have pointed out: *"little information exists to provide a guiding consensus on how much instructor interaction is required to take advantage of the pedagogical benefits of online threaded discussions"* (Mandernach et al, 2006: 252), with the intervening years since their study leaving the field richer but still no more certain. Thus, it is apparent that my specific research questions [detailed in Chapter 1] cannot be answered by existing literature, which, as Williams and Lahman (2011: 159) have identified, is *"complex and somewhat contradictory"*. I will therefore proceed, in the next chapter, to detail the methodology which has underpinned my study.

In considering methodology, it is notable that in all four themes of the literature review, where original research has been presented, a wide range of different research approaches and methods have been deployed and identified as inherently suited to studying online learning, including action research, phenomenography, hermeneutics, grounded theory, survey, mixed methods, and case study – although, somewhat disappointingly, this latter is frequently descriptive in nature, rather than being the explanatory or theory-generating variety (Yin, 2009), indicating an ongoing need for additional theory to be developed. [Note that the different types of case study, and their implications for use, are explored in detail in Section 3.3b].

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter will explore the methodology of this study – both in terms of the underpinning philosophy and macro-level research tradition observed; and also at the micro-level, focusing on the detailed technical approaches (methods) deployed.

In dividing ‘methodology’ into these dual aspects, firstly 'methodology as philosophy' and then 'methodology as technique', I have been influenced particularly by the work of Hammersley (2006: 273), which argues for the importance of an articulation of these overlapping yet distinct domains.

3.2 Methodology as Philosophy

A number of authors have proposed that philosophy is an important component of research methodology, since a researcher's personally-held beliefs and values govern how and why such research is carried out. For example, Creswell (2009: 5) suggests that all researchers should “*make explicit the larger philosophical ideas they espouse*”, in order for their readers to have some insight into the methodological choices they have made in carrying out their research. This is highly reminiscent of Pring's (2004) argument that:

“Without the explicit formulation of the philosophical background - with implications for verification, explanation, knowledge of reality - researchers may remain innocently unaware of the deeper meaning and commitments of what they say or of how they conduct their research.”

(Pring, 2004: 90)

Many authors, such as Guba & Lincoln (1994) refer to this underpinning philosophy in terms of a 'paradigm' (drawn from the Platonic notion of “**παράδειγμα**” or model) – defined by Willis (2007: 8) as “*a comprehensive belief system, world view, or framework that guides research and practice in a field*”. On the other hand, Creswell (2009: 6) consistently prefers to use the term 'worldview'; whilst Pring (2004: 90) simply refers to 'distinct theoretical positions'. In this work, I shall use the word 'paradigm' to reflect the systematic application of a philosophical framework.

3.2a *Underpinning Philosophy*

The philosophical, macro-level methodology for this study is located within an interpretivist paradigm. This study involves the real-life experiences and practises of real people, who are highly complex, sentient beings, who respond to specific circumstances and stimuli both cognitively and emotionally, and who are influenced by their own beliefs, values and previous experience. Thus, an objective, scientific, 'positivist' search for 'the truth' does not seem to me to be either feasible or appropriate; and indeed, I do not believe that there is a single universal 'TRUTH' in this context – teaching and learning involve individual personalities and each person's interpretation and reaction will therefore be unique, at least to some extent. In this, my beliefs align with Carr (2000) who has suggested that all educational research is inherently partisan, and must therefore be presented from an acknowledged point of view.

An interpretivist paradigm is based on the assumption that reality is subjectively defined and open to individual interpretation. Thus, it is most appropriate for this study, acknowledging that the 'data' collected from participants will be born out of their subjective experiences and will need to be further interpreted in order to tease out some insights and shared understanding. This may be seen as overlapping the notion of social constructivism, whereby meaning is negotiated and understanding is socially constructed (Pring, 2004).

Burton and colleagues (2008) offer a really useful comparison between interpretive and positivist frameworks, based around a series of seven essential questions about the research project, which are presented in Figure 3.1, below. From this, as I shall proceed to demonstrate, it is also clear that my work is comfortably seated entirely within an interpretive rather than a positivist paradigm.

1. How is reality defined? (**Ontology**)
2. How does the researcher perceive him/herself in relation to the research setting? (**Positionality**)
3. What is (are) the purpose / aim(s) of the research? (**Rationale**)
4. How is knowledge created? (**Epistemology**)
5. What role does theory play?
6. What are the quality criteria of 'good' research?
7. What ethical issues need to be addressed?

[emphasis in original]

Figure 3.1: Questions to identify competing research paradigms, from Burton et al (2008: 61-2).

Thus, Burton and colleagues (ibid.) advise that in the interpretivist paradigm *"reality is a construct ... dependent on different frames of reference"* rather than being an objective independent entity under the positivist paradigm. This description from the interpretivist approach fits my own expressed view perfectly.

In terms of 'positionality', Burton and colleagues (ibid.) advise that the researcher *"forms part of the research setting and is affected by it (for example, insider/outsider position)"*; whereas in the positivist tradition the researcher is expected to remain outside of the research setting, being objective and impartial. Again, my work is clearly located in the former, since I was a participant [tutor] within the course that I have chosen to investigate.

Meanwhile, the rationale for my work is exploratory and theory-building, rather than testing pre-determined hypotheses; and my own subjective views and beliefs have indeed been acknowledged, all of which again place my study within the interpretivist paradigm, according to Burton and colleagues (ibid.). And finally, my work aims to offer credibility and *"rich, dense data through triangulation"* (Burton et al, ibid.), and to give 'voice' to the study participants, which also places it within the interpretivist rather than positivist paradigm, despite the use of a quantitative element of data, presented in Chapter 5.

The approach I have adopted in this study also resonates with a definition of qualitative research described by Denzin and Lincoln (2005):

"qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them."
(Denzin & Lincoln, 2005: 4)

3.2b Positionality, Epistemology & Conceptual Framework

As noted above, Carr (2000) has proposed that educational researchers should embrace and acknowledge their own 'positionality', and the influence of their partisanship on the research. This study is based in my own previous experience researching online learning, as well as my personal experience as an online tutor.

As an initial phase of the project, I therefore articulated my underpinning conceptual framework in diagrammatic form, as advised by Punch (2009:83), in order to further clarify my own

CHAPTER 3: METHODOLOGY

personal stance and the questions I sought to answer. The resulting framework is shown as a diagram, in Figure 3.2, below:

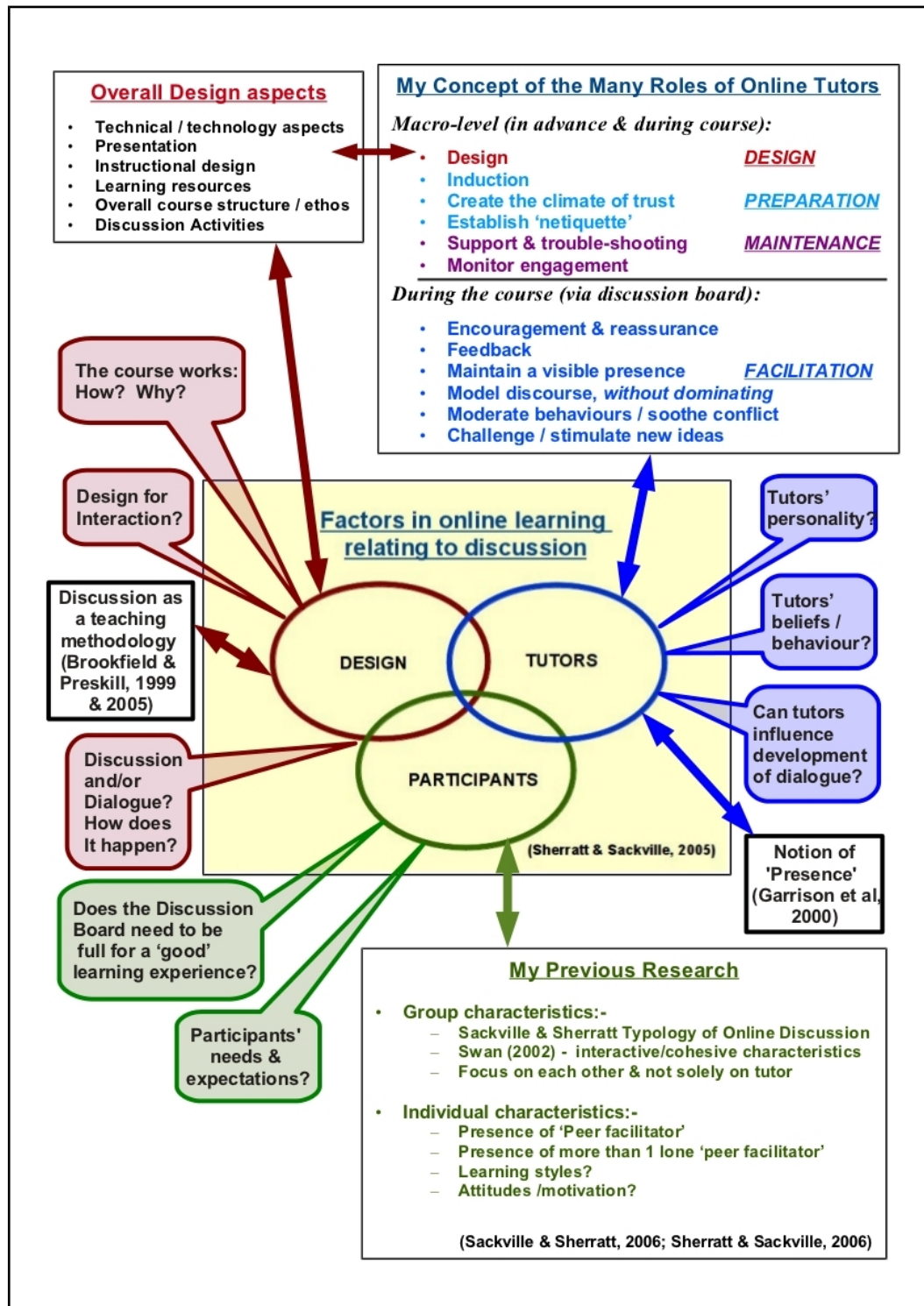


Figure 3.2: My Original Underpinning Conceptual Framework

CHAPTER 3: METHODOLOGY

In particular, this conceptual framework diagram sets the current study into the context of my previous work (Sherratt & Sackville, 2005), which identified the three overlapping areas of participants, tutors and course design as all having a role to play in developing optimum use of the VLE Discussion Board. This is shown as a Venn diagram, at the heart of the framework diagram. Each of the three elements are colour-coded [Design shown in red; Tutors in blue; and Participants in green], with matched colour-coded links to underpinning concepts and theory [shown in square black-edged boxes]. It should be noted that, although superficially similar to the Community of Inquiry diagram developed by Garrison, Anderson and colleagues (Garrison et al, 2000), there is a significant difference in how our model (Sherratt & Sackville, 2005) has been conceptualised: we chose to focus on the different actors involved, whereas Garrison and colleagues (op.cit.) focus on the actions themselves, regardless of who might perform them.

Meanwhile, the reference to Brookfield and Preskill (1999, 2005) links to my firmly-held pedagogic beliefs – that individual students learn by drawing on their own experience to make sense of new knowledge, and that this can be best achieved in a social context. Thus, I also value and believe in the inherent usefulness of discussion as a tool to support learning.

And the reference to Garrison and colleagues (2000) recognises the significance of the concept of 'presence', and most especially 'teaching presence', in online learning environments, and the influence that this work has had both on my own practice as a facilitator over many years, and on my research design.

In addition to the links to theory, some ongoing questions relating to each element are articulated on both sides of the diagram, using the same colour-coding to indicate how the questions relate to the central framework.

Finally, it should be noted that the original work referred to above (Sherratt & Sackville, 2005) then gave rise to further work (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a; 2006b; 2006c), which also underpins this current study, particularly as relating to the behaviour of participants in online discussion, and the impact of informal student 'peer facilitators' on group interaction.

3.3 Case Study Tradition

Having established my overarching philosophical stance, it is now necessary to explain the tradition in which my research is set. For this work, I have elected to work within the Case Study tradition. Lincoln and Guba (1985) opine that there is little agreement about what a case study actually is; whereas Creswell (1998: 61) proposes that a case study is “*the exploration of a bounded system*” such as a single programme, which should be investigated by drawing on multiple sources of information. This is a perfect fit for my work, as indeed, is the check-list of criteria for an educational case study proposed by Bassey (1999), shown below in Figure 3.3.

“An educational case study is an empirical enquiry which is:

- conducted within a localized boundary of space and time (*i.e.* a singularity);
- into **interesting** aspects of an educational activity, or programme, or institution, or system;
- mainly in its natural context and within an ethic of respect for persons;
- in order to inform the judgements and decisions of practitioners or policy-makers;
- or of theoreticians who are working to these ends;
- in such a way that sufficient data are collected for the researcher to be able
 - (a) to explore **significant** features of the case,
 - (b) to create **plausible** interpretations of what is found,
 - (c) to test for the trustworthiness of these interpretations,
 - (d) to construct a **worthwhile** argument or story,
 - (e) to relate the argument or story to any relevant research in the literature,
 - (f) to convey **convincingly** to an audience this argument or story,
 - (g) to provide an audit trail by which other researchers may validate or challenge the findings, or construct alternative arguments.”

[emphasis in original]

Figure 3.3: Definition of an educational case study (Bassey, 1999:58)

In early discussion, Creswell (1998) proposed that ‘case study’ should be considered as an essentially qualitative approach. However, in more recent work, (Creswell & Plano-Clark, 2007), Creswell's view of case study appears to be more closely aligned with other authors who espouse a more flexible and mixed approach. For example, Yin (2009:19) has shown a readiness to accept that case study can “*go beyond*” the purely qualitative, and can deploy mixed methods, incorporating a variety of other evidence, including quantitative data. Thus, he has emphasized the need for a case study to be evidence-based, and to consider this evidence from multiple sources (Yin, 2003). And Bassey (1999) has long been in agreement with Yin's (2003) proposition, considering the inclusion of quantitative data acceptable within the ‘case study’

genre. This is significant for my work, and the types of data deployed will be discussed later in this chapter.

In developing my ideas about what a Case Study is, or could be, I have been greatly influenced by Bassey (1999) and Yin (2003, 2009), as well as Creswell (1998). All of these authors write convincingly regarding the usefulness of taking account of multiple data-sources to provide a whole series of different 'lenses' with which to view the chosen singularity (*ie*: the case).

3.3a The Metaphor of the Lens

The metaphor of the '*lens*' is widely accepted, especially within social sciences and education, and is of particular significance in this project. In physical terms, a lens is a means of focusing light. Viewing something through a lens can also allow you to see it more clearly, but, as with a microscope, different lenses allow the observer to see different things. This is a strongly intuitive metaphor for viewing a problem or practice, often from a particular perspective, in order to achieve clarification. Within the field of teaching, Brookfield (1995) proposed that to achieve a holistic view of one's own practice, the critically reflective teacher should deploy four separate, but interconnected '*lenses*' – by which he meant that four different perspectives should be considered (*ie*: the views of self; colleagues; learners; and theory).

Furthermore, Brookfield (1998) proposed that by making use of a range of perspectives, reflective practitioners can escape from being 'imprisoned' within their own personal framework of perceptions and assumptions:

“To become critically reflective, we need to find some lenses that reflect back to us a stark and differently highlighted picture of who we are and what we do”.

(Brookfield, 1998: 197)

It should be noted that Brookfield's (1995) work on the critically reflective teacher has been influential in framing this study, since its focus is essentially on improving practice. Furthermore, the four lenses that he proposes (self, colleagues, learners and literature) are elements which are all represented within the project.

Meanwhile, in the research field, Creswell and Miller (2000) have also used this same metaphor to describe a similar process of drawing on different perspectives, in order to achieve clarification:

"When we refer to the lens, we mean that the inquirer uses a viewpoint for establishing validity in a study."
(Creswell & Miller, 2000:125)

Using different lenses to draw on a range of perspectives allows the researcher to explore the 'case' more fully - which brings us back to Bassey's (1999) advice, noted above, that case studies should draw on multiple sources of evidence.

3.3b Types of Case Study

It is clear that there is little homogeneity within the Case Study tradition, and that the primary function of a case study is not always uniform. Yin (2009:8) suggests that there are indeed three quite distinct major types of case study: *"exploratory case studies, descriptive case studies, or explanatory case studies"*, resonating with Bassey (1999:58) who suggests that case study research can be *'theory-seeking', 'theory-testing', 'story-telling or picture-drawing', or 'evaluative'*. This further resonates with Newby's (2010) proposition that educational research as a whole may have three distinct aims: *'to explore issues'; 'to shape policy'; or 'to improve practice'* (Newby, 2010: 8-10).

It is apparent from the original objectives of my study that there is a need to establish an understanding of what actually happens within the specified course, before any judgements can be made regarding best practice or the proposition of causal links. Thus, there is an initial need to describe and characterise students' experiences [Section 1.2, Research Sub-question 1a], which means that an initial descriptive (*"Picture-drawing"*) element of the case study is needed as a first step. However, it should be noted that this is only the first step in a much larger and more complex process. My case study seeks to go beyond simple description or illustration, to explore interactions, offer explanations and generate theory [Section 1.2, Research Questions 1 and 2]. Thus, this study can be located at the explanatory or theory-seeking end of the spectrum; with the overall aim of improving practice.

3.3c Establishing the 'Case'

The singular bounded system ('case'), which I have selected for the study is a single programme, the Postgraduate Certificate in Teaching & Learning in Clinical Practice (PGCTLCP). This is a substantial, year-long online experience for students. Furthermore, I have selected a single cohort of this single programme, since by choosing to focus on a single cohort, I could ensure that the experience of every participant was as nearly the same as it is possible to achieve, thus removing the maximum number of confounding variables, whilst retaining a naturalistic setting, remembering that this latter is an important element of case study research, according to Bassey (1999).

Initially, I had thought of studying the experiences of students and tutors on several different courses, but it very quickly became apparent that this would introduce some major (and thereby potentially significant and confounding) differences, the most crucial being that I am an '*insider*' in the PGCTLCP (Trowler, 2012), but would be an outsider-researcher on any other programme, thus leading to a different relationship between myself and the study participants. The dynamics of this and the resulting potential to introduce artefacts and flaws into any interpretation made me re-think this approach before completing the proposal stage of the research, choosing instead to seek greater homogeneity, and to pursue depth rather than breadth.

Having selected a single cohort of the PGCTLCP programme, this naturally led to a position whereby instead of needing to select a sample, all participants could be invited to participate, since there were only 33 students [32 actively engaged online, plus one 'lurker'] and 5 tutors on this programme during the specified year. A total of 24 students and all tutors [4 plus myself] chose to actively participate in the study, by means of interview or self-administered interview [questionnaire]; whilst nobody withheld their consent regarding analysis of Discussion Board postings, yielding a total of 38 individual subjects [33 students and 5 tutors].

In this research, in order to maximize the opportunity to consider multiple sources of data, my case study needed to employ a 'Mixed Methods' approach, deploying a quantitatively-driven analysis of the VLE Online Discussion archive, alongside the qualitative analysis of interviews. The quantitative analysis of the Discussion Board offers a rich source of information and insights into behaviours of both tutors and students. Postings have been quantified and also characterized using several different typologies and taxonomies, identified and discussed below. This multi-faceted approach to analysing online discussion has been explored elsewhere, in earlier work (Sherratt & Sackville, 2007).

3.3d Defining the Context of the Case

Cohen, Manion and Morrison (2011) advise that each case should be explicitly set within its own unique context. For this research, the chosen 'case' was a single cohort of the PGCTLCP programme. The programme consisted of three modules, of equal length, studied sequentially during a calendar year.

The cohort worked together in the five face-to-face day-school sessions during the year, but was divided for online work into four small groups, called Learning Sets, of around 8-10 students. Each set was 'balanced' so that they contained an equal ratio of males and females, and the spread of different professions was also the same in each group. Sets were also balanced to ensure that the more experienced participants were shared out equally, and each group also contained participants whose initial experience of Higher Education had been outside of the UK, as well as UK graduates. By carefully structuring the Learning Sets in this way, it was intended that participants in each learning set could gain an equitable learning experience.

However, since the main purpose of the groups was not research but teaching and learning, it should be noted that it was not felt necessary to keep the groups entirely even. As is inevitable in any course, there were a few drop-outs and deferred entry requests after the initial induction session, which left the groups no longer matched in size. But since everyone had met each other by then and had naturally started forming bonds within the groups, it was decided not to move anyone after the course had started, since it would be detrimental to community formation. It was also noted that there was still a good mix of experience and professions, and also a gender balance in each group, so there was no cogent reason to move anyone. Thus, the existing groups remained intact, and the Learning Sets for this study thus became three groups of nine and one group of six members respectively.

This decision was reviewed at the start of subsequent modules, but again it was agreed by the academic team that we should not move students to new groups, as this would destabilise the now-established community relationships. Learning Sets were therefore fixed for all three modules.

Meanwhile, tutors adopted a 'team-teach' approach during face-to-face workshops, but each Learning Set was assigned a specific academic tutor to work with them online for each module, moving to a different tutor for subsequent modules.

3.3e Situated Context of the Case

I have already alluded to my choice of case study as being the very bounded nature that appealed. Furthermore, in order to try to offer up an understanding of what is happening within online discussion, and especially within the complex and largely hidden student-tutor relationship, I wanted my 'sample' to be as closely controlled as possible. Thus, I chose one programme, with which I am intimately familiar. All participants were from health backgrounds, and although they did not all work within the same 'specialty' or indeed within the same medical or clinical profession, nevertheless their professions did give them something of a commonality of experience and shared cultural norms. They were also all mature postgraduates, and all had an interest in education, whilst maintaining their primary roles as clinicians. They had also all participated in exactly the same course, in the same year of delivery. All of the PGCTLCP students were subjected to the same course ethos and the same course design; and the course tutors were an established team. Thus, whilst complete homogeneity is impossible in reality, this situated context offered the closest to homogeneity that I felt would be possible to achieve.

However, since we had four Learning Sets and five tutors working together over the course of the year, there was still some distinct variation possible, and this will be explored during analysis [see Chapter 5] - but overall, there were at least more similarities in experience than would be achieved by exploring experiences of students who had completed different courses of study.

As noted above, I specifically chose to study a single programme, since the situated course context is already complex and multi-variate. Therefore, I did not want additional, and unnecessary, variables getting in the way of teasing out factors that might influence how dialogue develops or does not develop - the fewer differences between students' experiences and backgrounds, the better. In this, my stance is supported by Hammersley (1992: 194) who has proposed that if the researcher can exert some control, by the selection of the case, using membership criteria to remove extraneous factors, then the resulting research is altogether stronger, generates more plausible theory, and is also more generalisable. Furthermore, this proposition is also supported by Simons (1996), when she states:

"By studying the uniqueness of the particular, we come to understand the universal"
(Simons, 1996:231)

Thus, it has been important in this study to achieve the most particularly focused case possible.

As noted above, the aim of this case study is to offer explanations – *ie* to generate theory, not to test it. Once my theoretical proposition and tool-kit has been identified and substantially developed, then would be the time to try applying it to other courses and other student groups, to test out its robustness and the extent of generalisability – but this is clearly beyond the scope of this current research project.

3.4 Mixed Methods

As noted earlier, this case study research has been carried out utilising a parallel mixed methods approach. Mixed methods research has been simply defined by Tashakkori and Creswell (2007) as:

“research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry.”
(Tashakkori & Creswell, 2007: 4)

Meanwhile, Cohen and colleagues (2011) have placed case study research firmly within the mixed methods tradition, stating:

“Case studies recognise and accept that there are many variables operating in a single case, and, hence, to catch the implications of these variables usually requires more than one tool for data collection and many sources of evidence. Case studies can blend numerical and qualitative data, and they are a prototypical instance of mixed method research”
(Cohen et al, 2011: 289)

Creswell (2009) also offers a useful view of available research approaches, defining a continuum, with the purely qualitative at one end of the spectrum, the purely quantitative at the other end. He then identifies the pragmatic 'mixed methods' approach as occupying the middle ground between the two extremes, drawing on both qualitative and quantitative methods, and thus possibly also veering towards one end of the spectrum or other depending on the individual context and design of the project, and types of data deployed.

It is of some concern to note that Denzin & Lincoln (2005:10) have proposed that Mixed Methods research automatically favours quantitative data over qualitative, and that such research is inherently experimental rather than interpretive in design. To me, this is highly unsatisfactory, not least because they offer no rationale for this (in my view, untenable) proposition, and do not articulate the assumptions underpinning it. They seem to assume a hierarchy of research methods and paradigmatic stances, but this is implicit and also open to

considerable debate. Indeed, Silverman (2011:24) comments that “*the whole 'qualitative/quantitative' dichotomy is open to question.*” Furthermore, he also proposes that :

“I view most such dichotomies or polarities in social science as highly dangerous. ... At worst, they are excuses for not thinking, which assemble groups of sociologists into 'armed camps', unwilling to learn from one another.” (Silverman, 2011: 25)

This view illustrates the point made by Pawson and Tilley (1997: xiv) that methodological standpoints can become entrenched “*badges of honour*”. I agree entirely that such polarised positions are unhelpful, and I also disagree most strongly with Denzin and Lincoln's (op.cit.) assertion regarding mixed methods research, since it strikes me as needlessly defensive, and furthermore is based upon unfounded and unnecessary assumptions – firstly that data types and research designs can be rigidly classified with no consideration of either the research question or context; and secondly that research methods and design exist within a hierarchical system, whereby certain types can be expected to take automatic precedence. This denies individuality and reasoned choice on the part of the researcher, and ignores the individual context of the research. Instead, I prefer the more flexible and broader definition of Mixed Methods offered by Creswell and Plano-Clark (2007), which allows the researcher to choose how methods will be combined. This view is further supported by Kvale (2007); whilst recognising the arguments that rage about mixed methods, he nevertheless agrees that interviews can feasibly be combined with a variety of other methods, including quantitative approaches where appropriate.

I also find Mason's (2006) argument for mixing methods reassuringly pragmatic, favouring fitness for purpose over dogma – so not only does she reject the notion of a fixed hierarchy, a view which I applaud, she also argues passionately for the right of the researcher to deploy individual methods in the order and combination most suited to each particular study. This practical approach resonates strongly with my own views, and Mason's work (op.cit.) has therefore been highly influential on my study.

This study has utilised mixed methods in a parallel, convergent approach (Creswell & Plano-Clark, 2011) – *ie*: the collection and analysis of qualitative and quantitative data occurred within a single phase of work, but with each strand carried out separately and in parallel in the first instance, and then brought together later in the research process, to extend the overall narrative and thus tell a fuller story, to offer triangulation of information, and to enhance overall interpretation of results. The work has been carried out in several distinct strands, which are illustrated in Figure 3.4, overleaf, where purple items can be seen to represent qualitative

aspects of the overall work, whilst the pink item indicates the location of the quantitative element:

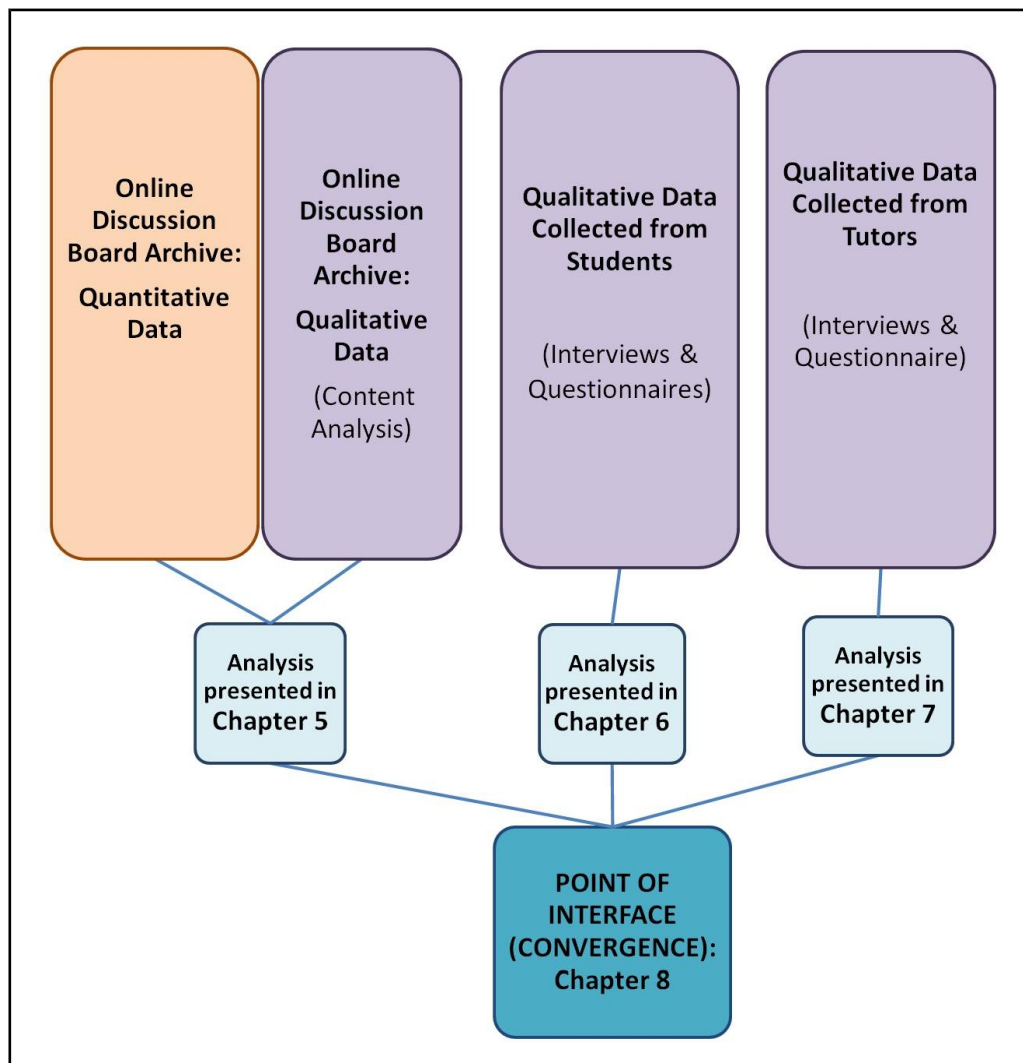


Figure 3.4: Individual Elements and Strands of Research within this Mixed Methods Study

It can also be seen from Figure 3.4 that 'integration' takes place in two stages, firstly between the quantitative and qualitative aspects of analysis of the Online Discussion Board Archive [see Chapter 5], and then again, more completely, at the 'point of interface', where all elements of analysis from all strands of work finally converge and are fully combined [see Chapter 8].

3.5 Influence of Other Research Traditions

Creswell (1998) has offered the highly convincing proposition that it is possible to locate the

CHAPTER 3: METHODOLOGY

same research question quite appropriately in a number of different traditions, with no single tradition being the only '*right*' choice, a view with which I readily concur.

This project has been firmly established as being located within the Case Study tradition. However, other traditions have also been influential on my thinking, and so a brief acknowledgement of the debts owed to these different traditions is warranted.

From the Action Research tradition, I have taken the notion of the 'practitioner researcher' (McNiff, 2002) since my study is focused very much on an exploration of, and improvement of practice, of myself as well as others. Meanwhile, I have also been conscious of myself as a 'participant observer', when conducting the discussion board analysis. Participant observation is widely acknowledged as a major element of Ethnography (Pole & Morrison, 2003), and I, as researcher, have been in the position of participant within the course, with the Discussion Board analyses representing 'observations' of online behaviour.

Meanwhile, Creswell (1998:51) reminds us that Phenomenology "*describes the meaning for several individuals of their lived experiences of a concept or the phenomenon*", and whilst I have not adopted this as my approach for this study, I have nevertheless been influenced by phenomenological tenets - for example, by the notion that my own pre-conceptions should be, as far as reasonably possible, put to one side (or '*bracketed*') while conducting interviews, in order to allow the study participants' experiences, values and '*voice*' to shine through. I feel that having maintained a neutral and non-judgemental stance during the interviews adds both value and depth to the interview data, and also supports my expressed aim of hearing the participants' '*voice*' and exploring individual experiences. I therefore acknowledge the influence of Phenomenology (Creswell, 1998) on both my research design and my data-collection practice. However, it should, of course, be noted that the interviews did not, in fact, take place in a social or moral vacuum, and, as Greenbank (2003) suggests, it is therefore not realistic to expect the researcher to set aside all of her own values and beliefs, but rather, that she should maintain an explicit awareness of them. By articulating my own views and experience prior to conducting any interviews, and by not seeking to influence the views of interviewees, I have indeed followed this advice.

Finally, the most closely-aligned alternative research tradition that has been influential on this study is Grounded Theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990, 1998). This methodology works on the basis that analysis and generation of theory should arise out of, and

be '*grounded in*' the data itself, rather than relying on any preconceptions or abstract hypothesizing on the part of the researcher. This can be seen to have been hugely influential in my approach in this study, especially in my choice of '*open*' coding, which has allowed themes to arise naturally out of the interviews, thus allowing me to fully acknowledge the '*voice*' of participants. This will be discussed further in Chapters 6 and 7, where the interview data are presented.

3.6 Researcher – Participant Relationship

My own position as an 'insider' is one which bears some scrutiny, as Trowler (2012) has advised, since this can bring both significant benefits and also some potential constraints and opportunities for bias to creep into the research.

Since I was a member of the tutor team for this programme, the participants all knew me and had shared a year-long learning experience with me. I am confident that participants did not feel coerced to take part in this study (not least because only 24 out of a possible 33 did so). However, the next question which needs consideration is – to what extent did participants tell me what they thought I might want to hear? Were they overly polite or positive? It should be borne in mind that I purposely tried to avoid being in a position of '*power*' by waiting until after the course finished. However, a couple of people had intercalated before the end of the year, and this caused me some concern, but in the end I decided to ask them to take part in the study anyway, explaining that I would not mark their assessments, in order to even out the ground as far as possible. I also suffered some anguish regarding whether or not to '*bother*' the student suffering from cancer [discussed in detail in Section 4.7], but she responded highly positively to being asked if she would like to contribute to my study.

I have reflected since, and can offer evidence that these students interacted with me far more as academic and social peers than the traditional lecturer-student relationship might suggest, and that the '*authority-gap*' between us was successfully kept to a minimum – certainly far more than might be expected if I were conducting research with 18-year-old undergraduates. For example, one of my students is an established Editor for a well-regarded peer-reviewed journal, and he invited me to act as an Article Reviewer. This, then, is not the standard hierarchised relationship of a senior academic and junior student, but rather, an interaction of more equal professional peers.

Interestingly, the issue of 'authority' is also one which resonates with my students [study participants], since a number of them, in turn, are in similarly authority-bound roles, as senior clinical educators, with the participants they wish to interview for their own studies.

3.7 Methodology as Technique: Data Collection

3.7a Timing of interviews

To mitigate against the natural 'authority' of my position as Programme Leader, I took the decision to wait until the end of the course before collecting data. This is discussed in detail in Section 4.4, where the issue of 'authority' and its ensuing implications are explored more fully.

The decision to collect data after the students had completed their course had an obvious impact on the range of possible data-collection methods available for this study, since it was not possible to implement a staged approach, such as reflective diaries or to engage in more regular dialogue during the year (which would, perhaps, have allowed for the capture of any change in the views and experiences of the participants). The main decision regarding method was therefore a choice between post-hoc interviews, focus groups or questionnaires.

There are, however, two main benefits of waiting until the end of the year, which outweigh any possible loss of opportunity: firstly, by waiting until the course had finished, individual participants were not influenced in their interactions or learning behaviour by the research itself – and whether or not one accepts the notion of a 'Hawthorne Effect', whereby individuals change their behaviour due to consciousness of being observed, it is nevertheless clear that it is possible, and indeed undesirable, for research design to impact on participants (Merrett, 2006). Secondly, the potential pressure to take part, caused by an invitation from the Programme Leader, was also removed, since any authority I may have had was lost once the students graduated from the programme.

3.7b Data Obtained from Study Participants: Interviews

As a prime method of data-collection within the qualitative strand of this study, I have opted for the semi-structured interview (both with students and with tutors), to allow me to explore in detail each individual's experiences and feelings. This approach is supported by Punch (2009), who states:

CHAPTER 3: METHODOLOGY

“The interview is the most prominent data collection tool in qualitative research. It is a good way of accessing people's perceptions, meanings, definitions of situations and constructions of reality. It is also one of the most powerful ways we have of understanding others”.
(Punch, 2009: 144)

The choice of semi-structured interviews warrants discussion. In this project, individual interviews (as opposed to focus groups) were the approach of choice, not least because of the pragmatic considerations involved in gathering together a group of senior clinicians. However, I also believe that the opportunity for each participant to speak individually was the right choice to make. Some participants were undoubtedly leaders within their groups, and this could have had an unfortunate dynamic in silencing anyone with aberrant or unpopular views.

The type of interview then needed to be decided. A fully structured interview would give the study designer control over the interview, but no flexibility, either for the interviewer, who cannot deviate from the pre-determined script, or for the interviewee, who therefore has no opportunity to contribute to the direction of the interview. This did not seem to be the most suitable format for this study. On the other hand, Kvale (2007:149) defines the semi-structured interview as:

“A planned and flexible interview with the purpose of obtaining descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena.”
Kvale (2007:149)

The flexibility to respond to issues raised by the interviewee, and opportunities to probe more deeply for clarification and understanding, where necessary, made this the style of choice. Of course, my own position and relationship with the participants needed to be considered, since this could impact upon the outcomes of the interviews. However, as discussed above, it was not felt that this offered an insuperable barrier, and the benefits of being able to establish a rapport with participants, and to probe for additional information where necessary clearly outweighed any associated challenges. Thus, it was decided that semi-structured interviews would be the most appropriate method for data-collection.

In carrying out interviews, my aim was to allow the 'voice' of the participants in my study to come through, in keeping with advice from Burton and colleagues (2008). However, it is clear that power over design and control of the interview itself largely rested with me as researcher. Indeed Kvale (2007:7) describes this as *“a conversation that has a structure and a purpose determined by one party – the interviewer”*. Thus, in an attempt to moderate this situation, I attempted always to maintain a neutral stance, and also to share control as far as possible with

my interviewees. I therefore started every interview with an open invitation to the interviewee simply to talk to me, and tell me what they wanted to comment on [eg: “*Tell me about the online discussion-board - anything you like - just what springs to your mind*”]. Sometimes this yielded interesting additional avenues to explore, other times less so, but the important factor here is that I was not keeping total control over what we discussed. This, for me, is important, especially bearing in mind my role (and potential ‘authority’) within the course as well as within the research – I did not want to constrain the direction in which the discussion went; although at the same time, I did, of course, have a set of prompt questions and additional probes or ‘*second questions*’ written down as a check-list [Appendix I], as advised by Kvale (2007:63), to ensure that all interviews covered the same basic ground, in addition to whatever the participants may have wished to bring in. However, in carrying out the interviews, and in keeping with the notion of ‘semi-structuredness’, I followed the ‘*flow*’ and natural feel of the conversation, rather than sticking rigidly to the set order of questions; and I therefore also asked spontaneous supplementary questions that were not pre-prepared, to clarify anything interesting or unexpected that arose during the interview. Immediately prior to the end of the interview, I invited any other comments or reflections from participants, thus ensuring that there was ample opportunity for other issues to be raised, if individuals felt that they were important to them.

Interestingly, since several of the student interviewees subsequently joined the MA Clinical Ed programme which I also lead, I have been able to engage in subsequent dialogue, exploring how and why I carried out the interviews this way (as the students plan whether or not to engage in interviews for their dissertation projects) – and the comments from the interviewees have been reassuring, indicating that their experience of being interviewed for this study was pleasant and relaxed, not at all authoritarian, and most importantly, that they felt they could raise whatever issues they felt to be relevant. (MA Clinical Education students, Personal Communication, 2008; 2009).

Interviews were recorded on a digital dictaphone. They were then transcribed into written form, although the audio recordings were saved for reference, and utilised to give an additional dimension of richness, by listening as well as reading the transcribed script, during the analysis phase of the study. All interviewees were asked for specific permission to make the recording, and all consented.

In planning and carrying out the interviews, I was influenced by Wengraf (2001), who proposes that:

“The main function of the interviewer in semi-structured – largely improvisatory – interviewing is to listen carefully to the responses of the informant”.

(Wengraf, 2001: 202)

Mindful of this advice, I chose not to make substantial field-notes during the interviews, since spending too much time making notes is also identified by Wengraf (ibid.) as the number one obstacle to listening. This allowed me to maintain eye contact and use body language to interact fully with the interviewees, to develop a rapport, and to reassure them that I was not only listening, but also interested in what they had to say.

The venue for the interviews was either my office (a practical solution), the interviewee's workplace, or the interviewee's home. The choice of venue was left entirely open, for each interviewee to decide, in an attempt to offer some element of control and power to the participants (as well as fitting around their busy work schedules). The implications of using these venues, in terms of impact on the relative power-balance, are discussed in detail in Sections 4.4 and 4.5.

In carrying out the student interviews, as well as trying to tease out what each person's experience has been of online discussion, and of being an e-learner, I also tried to find out if any tutors or any other students had been significant to each person; and of particular interest, what their expectations of tutors were at the start and are now; and what they felt the tutor's role should be. [see Appendix I for interview questions]

This approach was then replicated with tutors [see Appendix II], seeking to explore their underpinning beliefs and values, and their view of what the online tutor's role should be, as well as establishing each tutor's individual practice and experience of this particular course. This offers the opportunity to triangulate the data obtained from students, as well as shedding further light on individual tutor interventions, as witnessed in the Discussion Board archive, analysis of which is discussed later in this chapter [Section 3.7d].

3.7c Self-Administered Interviews: Questionnaire Format

In order to accommodate the needs of participants who were not able to take part in interviews, such as myself and the individual with serious health issues [discussed further in Section 4.7], the interview schedule was utilised in a self-administered manner, usually but not always answered in written form, effectively transforming it into a type of questionnaire [Appendix I].

This was first trialled when capturing my own contribution to the study, since I myself am also a tutor in this programme as well as the researcher, but was obviously not in a position to conduct an interview with myself. I did not want to invite anyone else to conduct the interview with me as subject, as I felt that this could introduce potential bias, since their interview technique would be subtly different from my own, despite the use of a basic question schedule as a template, due to their own slightly differing experience and underpinning values. So instead, I produced a reflective statement, scaffolded by the interview questions, which explored my response to all of the questions that I asked of other tutors - effectively turning the outline interview schedule into a self-administered interview (as discussed by Çelik, 2013), or free-text based questionnaire format. This, I felt, allowed my contribution to be as close as possible to the interview experience of other tutors, despite being in the form of a written statement, as compared to the audio-recorded interviews that colleagues experienced.

Naturally, my own reflections were captured prior to conducting any interviews, to ensure that my responses were not influenced by anyone else's expressed views. I do acknowledge, however, that the reverse is true, and that my conceptions and epistemological stance have undoubtedly influenced both the interviews (despite my attempts at neutrality) and the subsequent analysis.

When faced with a participant who was willing but practically unable to be interviewed, it was, therefore, logical to deploy this same approach, and simply utilise the interview schedule as a reflective template for self-administered interview (again, effectively turning it into a free-text based questionnaire), to allow her to record her reflections, just as I had done myself.

In transforming the interview schedule into a questionnaire format, it should be noted that Cohen, Manion and Morrison (2007:351) have proposed that "*the interview has some things in common with the self-administered questionnaire*", although in this instance, of course, I was actually doing the reverse, and using a type of questionnaire to be what was effectively a 'self-administered interview', as indeed I had already done with my own contribution.

However, Oppenheim (1992:100) also sees the questionnaire and the interview schedule as overlapping both in aim and in approach, so perhaps, bearing in mind these stated similarities, it might be argued that there was very little difference, in practice, between the original intended approach for data-collection and this additional variation.

Furthermore, one of the salient features of qualitative and mixed methods research might be said to be its inherent flexibility. Indeed, Janesick (2003) uses the metaphor of choreography to illustrate how the qualitative researcher flexibly deploys methods; and she then goes on to coin the somewhat unusual word “*methodolatry*” which she explains as being derived from a combination of the words ‘method’ and ‘idolatry’, to describe “*a preoccupation with selecting and defending methods to the exclusion of the actual substance of the story being told*” (Janesick, 2003: 64). Thus, some small deviation from the original research plan can be seen as allowable, or even beneficial, in order to meet the overall research objectives.

Secondly, and, perhaps, more importantly, however, I feel that we should also bear in mind ‘methodology as philosophy’ (Hammersley, 2006) rather than focus solely on ‘methodology as technique’ (ibid.), and in this, the ability of the research study to accommodate my own ethical stance must be considered. [Please note that the ethical dilemmas that I faced concerning inclusion of the seriously ill participant are explored in detail in Section 4.7].

Meanwhile, having made the decision to deploy a type of questionnaire [the modified, self-administered interview schedule], it was a logical and valid next step to invite other participants to complete the same 'questionnaire' if they were too busy or simply did not wish to be interviewed. This resulted in a further three responses overall, in addition to myself and the unwell participant for whom the 'questionnaire' had originally been modified, making it a useful addition tool for data-collection overall, and ensuring best coverage of the case population. Indeed, with the possible exception of having available time, these additional participants can be readily seen to meet Morse's (1998:73) criteria for a “*good informant*”, each being “*one who has the knowledge and experience the researcher requires, has the ability to reflect, is articulate, has the time to be interviewed, and is willing to participate in the study*”; and happily, the use of the 'questionnaire' format neatly gets round the issue of not having the time to be interviewed.

One of these participants chose to submit a dictaphone recording of her responses to the schedule of interview questions, which offered the added value of verbal cues to help with my precise understanding of her responses, in addition to the written transcript. This resonates more closely with the approach to self-administered interviews undertaken by Çelik (2013), who utilised media-based recordings rather than the written word to capture responses. However, this was not a feasible option for all participants, so it was left to individual choice.

Ultimately, I would argue that the use of a 'self-administered interview' [in this instance, a written questionnaire] represents a small compromise between my originally-planned method as compared to reality in practice, and furthermore, I would contend that it is an entirely acceptable variation in method, since it resulted in collection of more data than would otherwise have been possible, and most importantly, also included the 'voice' of a very vulnerable individual who thus would otherwise have been ignored and her views marginalised.

3.7d Data Derived from the Online Discussion Board

Another rich source of data has been the archive of postings on the WebCT Discussion Board. These data exist as a natural feature of the VLE. Data-collection for this aspect of the study has therefore been more around data-handling. Thus, to create a set of data files that can be subjected to analysis, Learning Set and General discussion threads were saved as '.html', '.doc', or '.pdf' documents. The Online Discussion Board captures conversations, but turned into text, thus bringing with it the same analysis opportunities and constraints as the interview transcripts, discussed above. It is also possible to apply a range of (largely quantitative) tools and taxonomies to the flow of the captured interactions. Analysis of this archive has therefore contributed to both the quantitative and qualitative elements of the overall 'mixed methods' study.

Rourke and colleagues (2001) note the challenges of working with a text-based representation of inter-personal interactions. They also identify different types of content analysis possible for what they refer to as 'computer conference transcripts' (*ie* Discussion Board archives) - most notably '*manifest content*' (*ie* what is actually said), and '*latent content*' whereby researchers look for patterns. Both of these aspects of analysis have been applied in this project, the results of which are presented in Chapter 5. The types of analysis applied to these data-files are also discussed below [Section 3.8b].

3.8 Methodology as Technique: Data Analysis

The study data, both quantitative and qualitative, have been analysed according to the parallel mixed methods approach underpinning the study design. Teddlie and Tashakkori (2009) explain that:

“Parallel mixed data analysis involves the separate statistical analysis of QUAN data sources and thematic analysis of QUAL data sources within their respective strands.

Although the strand analyses are independent, each provides an understanding of the phenomenon under investigation”
(Teddle & Tashakkori, 2009: 341)

This, then, allows for analysis to be carried out on each element independently, with types of analysis suited to the particular data in hand, and with the mixing occurring at the interpretation stage of the research. As noted in Section 3.7, this research consists of four separate elements of work, carried out in three strands (Online Discussion Board Archive; Student Interview Data; Tutor Interview Data).

3.8a Interview and Questionnaire Data

Thematic content analysis of interviews and questionnaires, both from students and tutors, has been carried out using a six-step 'thematic networks' approach (Attride-Stirling, 2001). Using the thematic networks approach, individual descriptive codes are initially allocated to emerging themes, which are then subsequently grouped and condensed, firstly into Organising Themes and then into Global Themes. [see Figure 3.5, below].

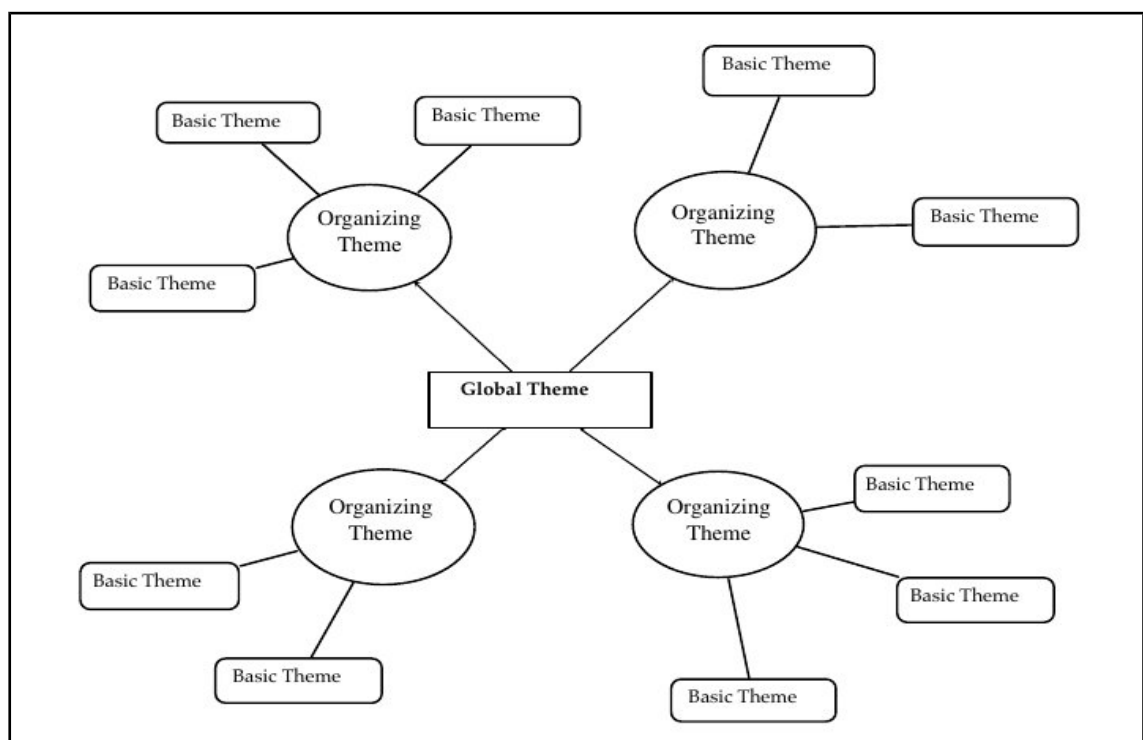


Figure 3.5: Thematic Network (Attride-Stirling, 2001), reproduced with permission

This is a comprehensive approach, which displays both descriptive and analytic themes at the same time, and also demonstrates their inter-relationships. It has some similarities to 'causal

networks' discussed by Miles and Huberman (1994), but I feel that the inclusion of the basic descriptive element further aids understanding.

The six individual steps that make up the Thematic Network approach (Attride-Stirling, 2001) are shown as chronological stages in the process of analysis in Figure 3.6. Thus, the thematic network approach (Attride-Stirling, op.cit.) can also be seen to conform to the analytical hierarchy proposed by Spencer and colleagues (2003), of initial labelling and data management, followed by the generation of descriptive accounts, leading finally to explanatory accounts.

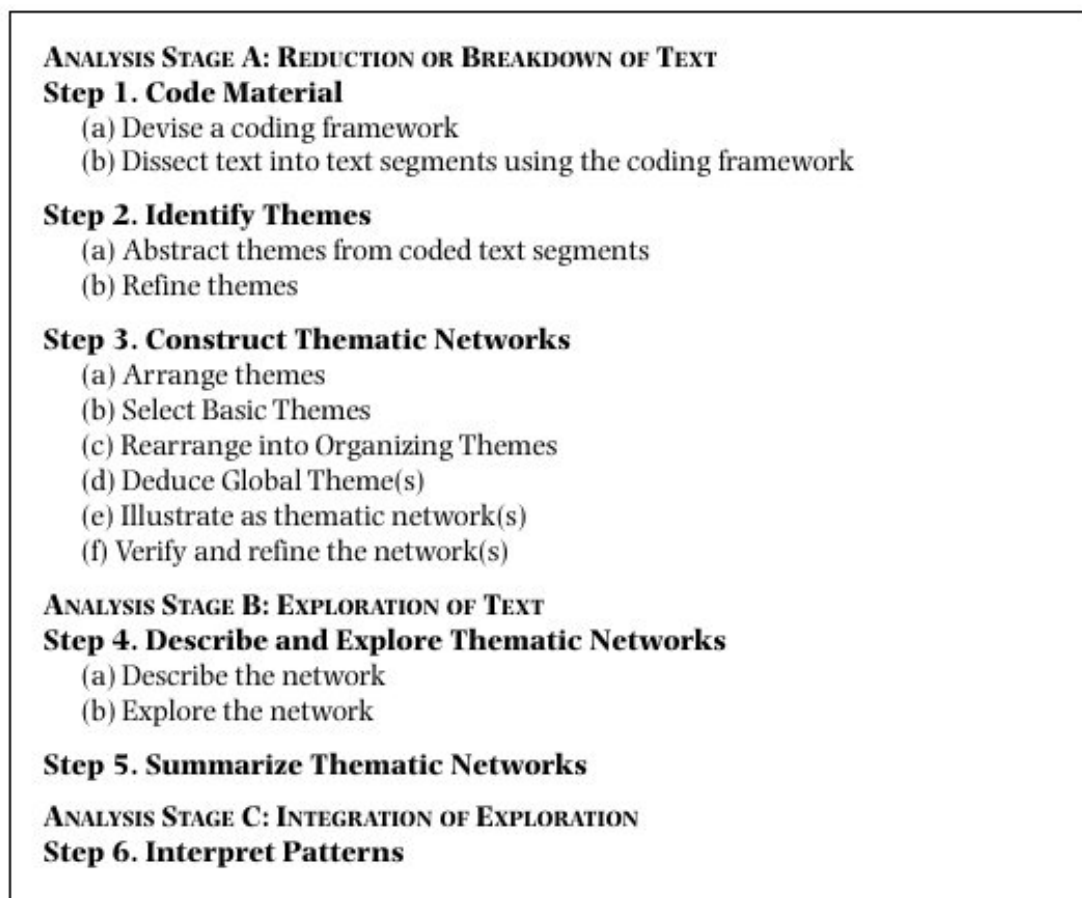


Figure 3.6: Six steps of Thematic Network approach (Attride-Stirling, 2001), reproduced with permission.

For this work, I have used the definition of a 'code' offered by Saldaña (2009):

"A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data." (Saldaña, 2009:3)

The coding framework used for this analysis was an open, "data-driven" approach (Gibbs, 2007: 45) – ie the codes were not devised by me in advance and imposed by myself as

researcher, but instead, they were allowed to arise naturally out of the content. I felt that this was important in order to capture the viewpoint of the participants. Gibbs (ibid.) notes that researchers cannot enter their research devoid of preconceptions, due to their familiarity with the field of study – and indeed, as noted earlier, as researcher, I recognise that I had some control over the focus and direction of the interviews.

However, I had also made an attempt, both at the start and end of each interview, to offer an open opportunity for each participant to raise issues of importance and significance to them, thus handing some element of control over to the participants themselves. Therefore, it was also important to allow the thematic codes to reflect this, by deploying an open coding approach.

3.8b Discussion Board Analysis

In addition to simple quantification of results, analysis of the discussion board archive has been carried out in two parts: content analysis of the actual discussion archive, and quantitative analysis by means of the application of a series of established typologies and taxonomies. Multiple dimensions of interaction can be readily explored, depending on precisely which typologies or taxonomies are used. For this research, the work of Garrison, Anderson and colleagues (2000) on the Community of Inquiry (CoI) has been also highly influential. As noted in Section 2.2, the CoI Framework consists of three overlapping elements of '*presence*' found in online courses, and especially in the contributions of individuals participants to discussion threads [see Figure 3.7, overleaf]. When analysing online interactions, all three aspects of '*presence*' have been considered. This has allowed me to investigate the development of a sense of 'community' which Rovai (2002) finds inherently linked to interaction online.

In considering the input of tutors on the Discussion Board, although all three elements of the CoI framework have been applied, I have considered in particular the '*teaching presence*' aspect of the CoI model (Anderson et al, 2001). Note that the underpinning theory and initial research relating to the development of the CoI framework is discussed in detail in Section 2.2; and the application of the CoI framework in this study is considered in Section 5.4.

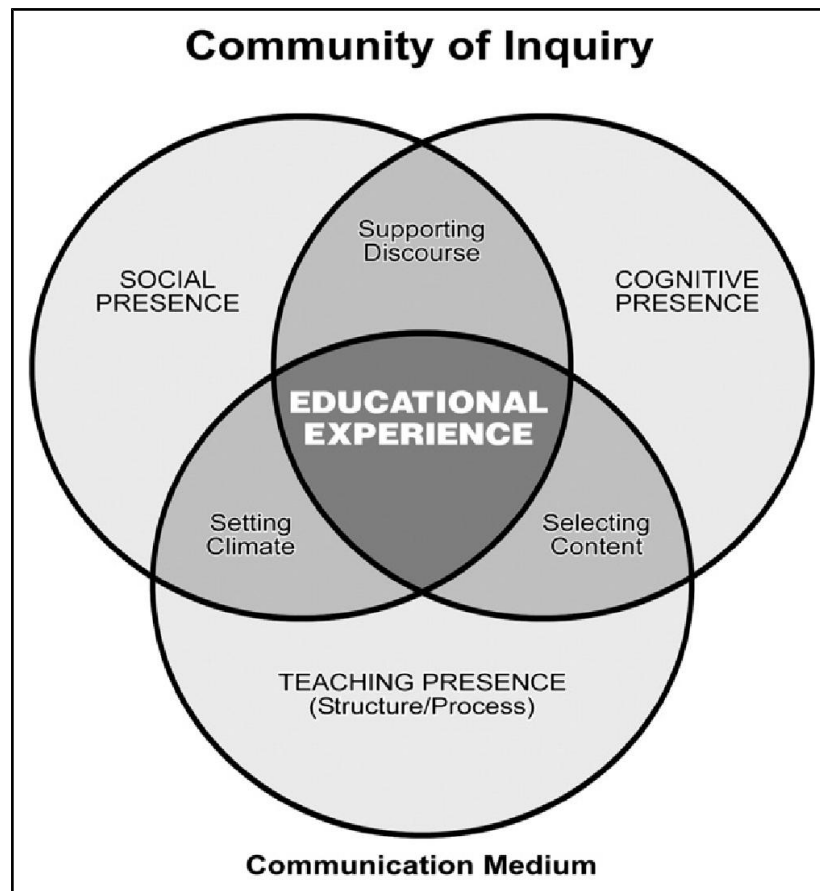


Figure 3.7: CoI Framework (Garrison et al, 2000), reproduced with permission.

In addition, when considering tutor inputs, I have also used the newer taxonomy proposed by Blignaut and Trollip (2003a, 2003b, 2005a). As noted earlier [Section 2.2f], this framework is somewhat simpler than CoI, with fewer overall categories to explore (just six in total, as compared to the three elements, ten sub-categories and 44 indicators of the CoI framework). There are also some small, yet quite significant differences in approach, which makes this newer framework an attractive additional tool for analysis – most especially, the separation into categories of input 'with academic content' and 'without academic content'. The three categories 'without academic content' are Administrative; Affective; and Other (including presenting discussion topics). The three elements of activity 'with academic content' are defined as Informative; Socratic, and Corrective. I have suggested that presenting discussion topics does have an inherently 'academic' nature, and thus, some people may find the allocation of topics for discussion to the non-academic 'Other' category slightly unsatisfactory. Nevertheless, this taxonomy offers a simple yet comprehensive way of presenting the actions of a tutor, and so, despite this minor problem, I have found this particularly helpful in distinguishing between different types of intervention from tutors, in a way which is less readily characterised in the

CHAPTER 3: METHODOLOGY

CoI. Note that the results of the application of these frameworks can be found in Sections 5.4 and 5.5.

A further analytical tool used has been my own Typology of Online Responses (Sackville & Sherratt, 2006), which seeks to identify the level and development of true discussion (as compared to monologue or 'bulletin board' posting) and interaction within the online context. There are therefore four main categories used, to classify postings with academic content, as shown in Figure 3.8, below. It should be noted that a fifth category ('Other') is also used, to capture postings whose content is wholly social or technical support, rather than academic in nature.

Statement	A view expressed. A 'closed' statement. Not inviting response or comparison. A position statement
Limited response	Refers back to an earlier posting, but only in a limited way. May be encouragement, eg: "Yes – I agree".
Questioning response	Opens up the topic. Expands on ideas. Makes comparisons.
Dialogue	Building on ideas, taking them further, introducing new interpretations, joint problem-solving, disagreements and disputes.
Other	Solely social interaction or technical support. (not academic in nature).

Figure 3.8: Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

At first sight, this typology seems to offer some resonance and potential overlap with the Transcript Analysis Tool (TAT) developed by Fahy and colleagues (2001), notably in the sharing of two categories ('Statement'; and 'Questioning'). However, beyond this, the divergence of the two frameworks is significant, with the Sackville and Sherratt Typology adding the categories 'Limited Response' and 'Dialogue' as compared to the TAT's, 'Scaffolding', 'Reflection' and 'References'. The main reason for this divergence can be seen in the differing aims of the two frameworks: the TAT is designed to be applied at the micro-level of each individual sentence, to enable detailed analysis of the actual content of postings; whereas the main aim of the Sackville and Sherratt Typology of Online Responses is to identify interaction – that is, the overall shape of a conversation, and the contribution made by each posting to the progress and development of an online discussion.

3.8c Unit of Analysis

Choosing an appropriate unit of analysis for online discussion transcripts is a widely acknowledged challenge (see, for example, Rourke et al, 2001). The unit of analysis applied in this study, for the application of both the Blignaut and Trollip (2003a, 2003b, 2005a) taxonomy and also the CoI framework (Garrison et al, 2000) has been at '*thematic*' level rather than classifying messages as a whole. In taking this approach to analysis, the recommendation of Blignaut and Trollip (2003b) has been observed, thus allowing each individual message to qualify under several, or indeed, all headings. This approach offers greater subtlety of analysis, since several distinct elements of a single posting can be acknowledged. This has therefore been especially useful when considering tutor postings, of which there are relatively few.

However, in keeping with our own previous practice, the Sackville and Sherratt (2006) Typology of Online Responses has been applied at a more macro-level, classifying whole messages rather than individual themes. The message is used as the unit of analysis, since this typology mainly seeks to identify the '*flow*' of interaction, and the existence (or absence) of dialogue. Thus, this typology can also trace basic trends in interaction and the approach of individuals to the online discussion board. Note that the application of this analysis is discussed in Section 5.3.

3.8d Social Network Analysis

To obtain a more detailed graphic representation of interactions within the online Discussion Board, and to aid comparison between groups, social network analysis (SNA) has also been carried out. As Lisboa and Couthino (2013:146) have claimed: "*SNA is a powerful tool ... it functions as a kind of a mirror that reflects the organization of the whole community*".

For my analysis, I have chosen to utilise the '*Social Networks Adapting Pedagogical Practice*' (SNAPP) application. This is an analytical tool, designed to run as a VLE 'applet', which displays threaded online discussions as '*sociograms*' (Dawson, 2008; 2010). These can, perhaps, be considered somewhat reminiscent of Dysthe's (2002) hand-drawn '*communicograms*', albeit inherently more powerful due to the additional facility afforded by automatic data-capture from the VLE. Each coloured shape, or node, represents an individual participant, joined by arrows to everyone they have responded to or who has responded to them (Dawson, 2010; Dawson et al, 2011). SNAPP sociograms can be displayed anonymously, or with each participant's node identified, either by name or by code.

For greater sophistication of analysis, SNAPP data files can be saved in '.vna' form, for use with analytical software. For this study, I have used NetDraw (Borgatti, 2002) to analyse and present SNAPP sociograms, an example of which is shown in Figure 3.9, below:

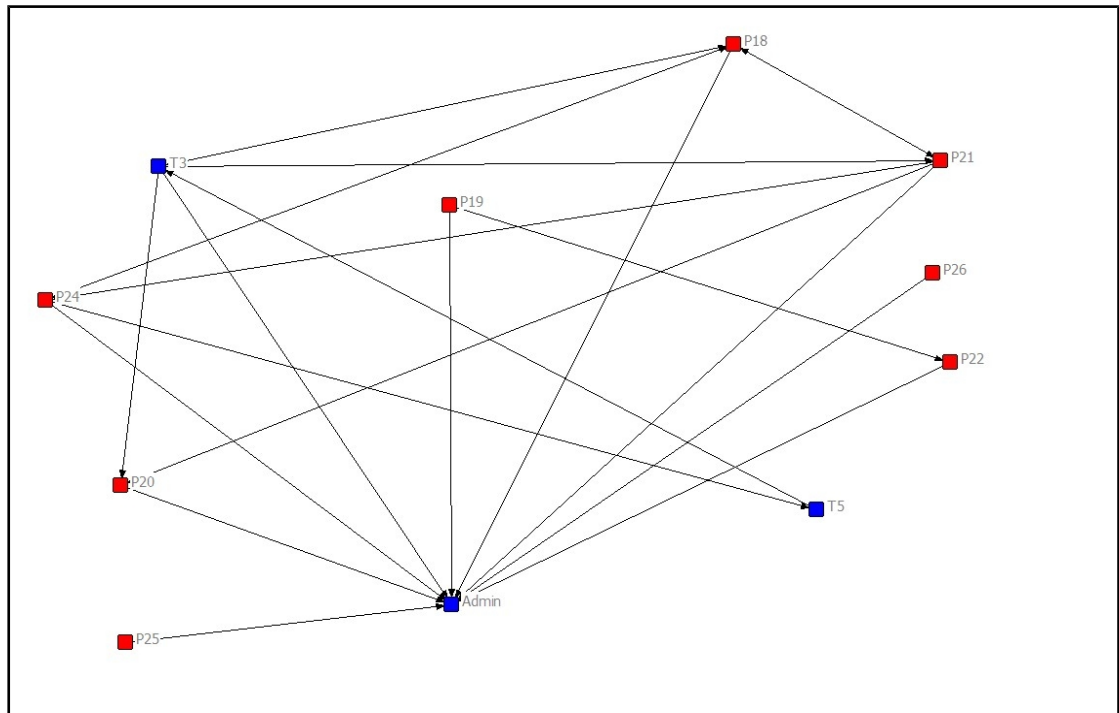


Figure 3.9: SNAPP Sociogram (Dawson,, 2010), created using NetDraw (Borgatti, 2002)

Thus, it is possible to observe the 'flow' of interactions between students, and between tutors and students, to identify whether or not all members of a group communicate with each other; and thus to tease out influences in the development of dialogue. This analysis is presented in Section 5.6.

3.9 Academic Dialogue

A final stage of the process of data analysis and theory generation has been engagement with academic colleagues. Bassey (1999) advises of the importance for all educational researchers, and for those deploying case study research in particular, of maintaining dialogue with academic community:

“the role of educational research is to inform professional discourse, and to be informed by it.”
(Bassey, 1999: 51)

Thus, throughout the project, I have sought to extend my academic and intellectual network beyond the confines of my own university, and I have explored the feasibility of my emerging theory, (as well as, in later years, refining, and testing the wider applicability of my findings across other courses and sectors), by means of attendance and regular peer-reviewed presentation at national and international conferences (Sherratt, 2008a; 2008b; 2008c; 2008d; 2009a; 2009b; 2009c; 2010; 2011). The conferences I have selected have had a variety of foci relevant to different aspects of this study, such as Networked Learning, Improving University Teaching, Learners in the Co-creation of Knowledge, Collaborative Action Research Network (with a particular focus on ethics), and Edge Hill's own SOLSTICE (e-learning) conferences.

Furthermore, Hammersley (2001) reminds us of the important part to be played by the academic community in validating research findings and confirming generalisations, a view with which I readily concur. Thus, it has been reassuring to note resonances between the preliminary and ongoing findings from my work with the experience of online tutors elsewhere in the UK, and from the rest of the world, in particular, from Canada, USA and Australia. Please note that generalisability is addressed in detail in Chapter 9.

CHAPTER 4: ETHICAL CONSIDERATIONS

4.1 Introduction

Since this research is a case study of a blended learning postgraduate course for clinical educators, it is, perhaps, pertinent to start this chapter by noting the similarities, observed by Cohen, Manion and Morrison (2007), in ethical codes of conduct between the fields of medicine and educational research.

*“Non-maleficence (do not harm) is enshrined in the Hippocratic oath, in which the principle of **primum non nocere** (first of all, do no harm) is held as a guiding precept. So also with research.”*
(Cohen, Manion & Morrison, 2007:58)

Despite a possible misattribution of the work of the Roman physician, Galen (Gillon, 1985; Klintmalm, 2008), nevertheless their point is well made – the promise to abstain from doing harm in the Hippocratic oath, “ἐπὶ δηλήσει δὲ καὶ ἀδικίῃ εἵρξαι” (National Library of Medicine, 2009), is indeed a sound basic principle for all practitioners to adopt, be they doctors or educationalists. This, therefore, offers common currency between myself (an educator) and my students (clinicians), and is always present, implicitly, in all of our work as practitioners and in our professional interactions, both with each other and separately. Quite simply, this ethical and moral stance is expected to underpin everything that we do, and I would suggest that it is, therefore, also a reasonable expectation of my students in taking part in the study. I am supported in this view by Mockler (2014) who has proposed that:

“The act of engaging in sound and ethical practitioner research, regardless of context, encourages and indeed demands an alignment between the ethical framework employed in the research enterprise and the ‘everyday ethics’ of practice”
(Mockler, 2014: 146)

Furthermore, I find it significant that Furlong and Oancea (2005) propose that “*propriety*”, which they define as the extent to which a research project “*conforms to legal requirements and to ethical principles*”, should be used as a measure of quality by which to judge applied and practice-based educational research, (Furlong & Oancea, 2005:12). This view of ethical practice as a key quality indicator for research is also supported by Groundwater-Smith and Mockler (2002, 2007). Therefore, this chapter explores the ethical challenges faced in carrying out this study, and the way they have been met.

4.2 Ethical Guidelines and Review

When I commenced this study, the Faculty of Education at Edge Hill University did not have its own independent Ethics Committee. At that point, the Faculty stance was to articulate a requirement that all researchers must act ethically, and in keeping with the Guidelines of the British Educational Research Association (BERA 2004); and to provide an ethics check-list so that the researcher could self-assess their individual level of risk. If the researcher could not answer favourably to the simple ethics check-list, then she was expected to apply to the central University Ethics Committee (a cross-faculty committee which exists primarily to deal with difficult and challenging ethical cases).

My study related easily to the ethics check-list and yielded no significant concerns, and so it was confirmed at the Registration Viva that referral to the institutional Ethics Committee would not be required. However, as I will explain later in this chapter, I did choose to present some of my emerging ethical issues at an international meeting of the Collaborative Action Research Network (CARN), of which I am a member, in order to enter into dialogue with experienced educational researchers from across the UK and beyond.

Conforming to the BERA (2004) Guidelines in designing my study was by no means a challenge, since their requirements resonate with my own personal ethical beliefs and values. In particular, I noted section 6, which states:

“6. The Association considers that all educational research should be conducted within an ethic of respect for:

- *The Person*
- *Knowledge*
- *Democratic Values*
- *The Quality of Educational Research*
- *Academic Freedom”*

(BERA, 2004: 5)

It should be noted that during the course of this research, the BERA Guidelines were revised. However, this section has remained unchanged in the later version of the guidelines (BERA, 2011: 4). This leads to the BERA-compliant researcher embracing the concepts of voluntary informed consent, their right to privacy, and respect for individual participants. The Researcher must also consider and seek to minimize any *“Detriment Arising from Participation in Research”*, which clearly resonates with the notion of non-maleficence, discussed above. These concepts, and their implications for my study, will be addressed in turn during this chapter.

4.3 Voluntary Consent

“The voluntary consent of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision” The Nuremberg Code, 1947: principle 1.

(BMJ, 1996: 1448)
[emphasis not in original]

Whilst it should be remembered that the principles in the Nuremberg Code refer to consent to physical experimentation on human subjects, which naturally carries the prospect of more serious potential harm to individuals than short, one-off interviews about a non-controversial and non-traumatic experience, nevertheless, the principle is a sound one on which to base an ethical approach to research. Indeed, Flinders (1992) proposes that three main elements are required in order to fully protect subjects in qualitative research: consent, confidentiality, and the avoidance of harm.

As noted in Chapters 1 and 3, my research can be seen as falling into the category of practitioner research. Groundwater-Smith and Mockler (2007) posit the view that:

“Practitioner research is subject to the same ethical protocols as other social research. Informed consent should be sought from participants, whether students, teachers, parents or others, and an earnest attempt should be made to ‘do no harm’.”

(Groundwater-Smith & Mockler, 2007: 205)

Furthermore, Groundwater-Smith and Mockler (ibid.) go on to recommend that such research should also be “transparent” in process, and the researcher should be accountable and also be able to defend these processes to the wider community. These views resonate strongly with my own ethical and philosophical stance, which is that, as far as possible, the researcher is responsible for ensuring that participants know and understand what they are agreeing to; and that the researcher should behave with honesty and integrity, such that she is both willing and able at all times to give a reasonable explanation of process and methodology. Therefore, I will commence with an exploration of consent and potential harm in relation to my student subjects, and I will then progress to consider the issues of both consent and potential harm in relation to my fellow teachers.

4.4 Issues of Authority and Consent

A significant ethical issue raised by this research is my own position as Programme Leader of the course which forms the ‘case’ of my case study. Clearly, my position has a level of ‘authority’ which could be seen as influencing students in their decision to take part, such that they would not consent of their own free will. The issue of authority and its potential to coerce students to comply was therefore addressed both by careful explanation and wording of the invitation to take part, and also by additional measures outlined below.

The invitation to take part in the interviews was originally delivered at a face-to-face meeting at the end of the year-long course, at which I made explicit my reason for undertaking the interviews (this doctoral study), and I also articulated the element of choice, and that no adverse consequences would arise out of not taking part. Furthermore, in order to give unwilling subjects a way to save face, I acknowledged their time pressures and significant other commitments, so that those who might have been embarrassed to admit that they did not wish to take part in the study could simply blame their circumstances. This I felt was especially important, bearing in mind that all subjects had known me for at least a year, and so it was not the same situation as refusing to take part in a study carried out by a stranger.

The students were given the opportunity to ask questions, and then anyone who was willing and able to take part was asked to write down their email address or other preferred mode of contact, so that I could make contact at a later date, when the study was ready to commence. At that second point, when I contacted them individually to arrange the interviews, they had a further opportunity to withdraw from taking part in the study, and several subjects did indeed indicate at that later time that they were ‘too busy’ to take part. We have no way of ascertaining whether these people were genuinely too pressed for time, or whether they had, on reflection, decided against becoming involved. In the end, it does not matter which of these options reflects reality, since they took advantage of the opportunity to review their freely-given and voluntary consent to take part.

Most importantly, however, my aim was to ensure that the data collected could not in any way influence the grades achieved by students, or indeed, *be perceived as* having the opportunity to exert this influence. To this end, I originally planned to conduct the student interviews shortly after the end of the course, whereby the experience was still fresh in the minds of the students, such that the interviews were meaningful, but all assessments had already been completed.

CHAPTER 4: ETHICAL CONSIDERATIONS

Naturally, the decision to collect data after the participants had completed the course had an impact on possible data-collection methods, since it was not possible to implement a staged approach, such as reflective diaries or more regular dialogue during the year. This has already been discussed in Sections 3.7a and 3.7b.

For everyone who completed the course within the year, as planned, this strategy worked perfectly. However, only when I came to implement my plan and explain the research to potential subjects did I realize that this approach was, in fact, fundamentally flawed: three people had intercalated during the year, and so had not completed their studies at this time, and this caused me some considerable concern. In the end I decided to include them anyway, but made them aware that no harm would ensue if they chose not to take part. In particular, I was careful to inform them that I would not be in a position to decide their final grade. Whilst I am confident in my own integrity, I am aware that it must be possible for others to see this as well. Indeed, in order to ensure freely-given consent on the part of those students who had not yet completed the programme, it was of paramount importance to ensure that they were aware that I had taken action to remove myself as far as possible from a position of power, so that it did not impact on either their choice to take part in the study or what they said at interview. Since this involved allocating the students to be supervised by a tutor other than myself, I am confident that my specific arrangements were sufficiently transparent.

Of course, I must also ask whether allocating these students to a tutor other than myself might have an unseen adverse impact on their learning experience. But since all students had been supervised by at least two, and in some cases three tutors during the previous year anyway, and since all members of the programme team were experienced and successful academic tutors, I would suggest that there was no disadvantage to these students having someone other than myself as their personal academic tutor.

Likewise, my plan of interviewing after the end of the course was confounded by those students who opted to return to Edge Hill to engage in the progression opportunity, the MA in Clinical Education, for which I am also not only the Programme Leader, but also one of the main tutors in a smaller course team. For these individuals, the issue of ‘authority’ and power remained real, since I was, once again, their Programme Leader. The steps I had taken to protect their right to choose whether or not to take part would therefore seem to have been thwarted. However, I am reassured that two of the students who did not take part in interviews were amongst their number, and with no apparent awkwardness exhibited, indicating that these individuals, at least,

did not feel that they had been unduly pressurised or coerced. It was not, in this instance, always possible for me to remove myself from the assessment process, since the course team was small (consisting for some modules of just myself and one other colleague), but all students were made fully aware of the rigorous second-marking and moderation procedures adopted for all assignments within the MA programme, and in this way, I believe that reassurance and support was offered to the students.

4.5 Location of Interviews

Participants were given a free choice regarding where the interviews took place, and a significant number opted for me to visit them either in their own workplace or at home [see Table 4.1, below]. Since all of the participants on this programme were established senior professionals in their own clinical context, offering to conduct the interview in a place where they had authority was intended to help to reduce any perceived power-gap between us. Likewise, visiting them in their own homes clearly gave them a psychological advantage, which would also help to reduce any authority issues.

Of course, my travelling to visit them was also a practical consideration for busy professionals, since time was an acknowledged challenge in obtaining the interviews, and this allowed them to fit the interview around other commitments.

LOCATION OF INTERVIEW	
My Office	9
Their Workplace	9
Their Home	3
None (Questionnaire Response)	3
TOTAL	24

Table 4.1: Location of Student Interviews

In contrast, the tutor interviews all took place in my office, despite colleagues also being offered the choice of location. However, this may be due to logistical reasons, such as many academic staff not having individual offices, or the opportunity to hold the interview either before or after another meeting. It may also indicate a greater degree of comfort with our more obviously equal status as academic colleagues.

4.6 Inclusion of Discussion Board Data

Meanwhile, the issue of consent regarding analysis of the discussion board deserves separate consideration. Interestingly, even those who declined to be interviewed did not withhold their consent to the discussion board being analysed. This may be due, at least in part, to the fact that at the start of the year, members of the course team had introduced their ongoing portfolio of research, based on the course, and explained that the reason for undertaking this research was to understand online interaction and improve the learning experience for future cohorts. Anonymous, mixed methods analysis of discussion postings featured in that research, and so all participants will already have had something of an understanding of the implications of discussion board analysis.

Of course, some authors, most notably Rourke and colleagues (2001), propose that consent is not actually required in such a context, as long as anonymity is preserved:

“The study of computer conferencing transcripts seems to present little danger of maleficence, and we believe high potential for beneficence -- especially in potential to increase learning efficacy of subsequent conferences”. (Rourke et al, 2001: 20)

However, in this proposition, they fail to take into account what I believe to be a significant factor, that the purpose of the discussion board postings was not research. Furthermore, participants were using the WebCT discussion board secure in the knowledge that it was *not* a public environment, but was restricted to the students and staff on that course. To then quote their words without their knowledge or consent, seems to strike at the very heart of the ‘safe place’ that they had been promised! Thus, it has been important to me to note that all students were asked whether or not their postings could be subjected to anonymous analysis, and, as noted above, nobody chose to withhold their consent.

4.7 Decision to Involve a Vulnerable Individual

The decision to involve one of the student participants deserves some further consideration. This individual had attended the face-to-face session when I had explained my proposed work and asked for initial consent, and at that time, she had volunteered to take part on the study. Subsequently, however, and before any interviews could be arranged, the course team discovered that this individual had been diagnosed with cancer, and would be undergoing immediate surgery followed by a long and arduous treatment involving both chemotherapy and

CHAPTER 4: ETHICAL CONSIDERATIONS

radiotherapy. Thus, this individual had become a 'vulnerable adult' (Department of Health, 2000) for whom special consideration would be needed.

My immediate response to hearing of this diagnosis was to withdraw her from the study, on the grounds that the researcher must not cause any burden to the individual subject. In this, I felt that I was adhering to the notion that above all, I must do no harm, and must not put my own selfish needs in front of the well-being of the individual. I also believed that in so-doing, I was conforming to a professional norm, of protecting the vulnerable adult from harm or intrusion, noting that the BERA guidelines state that especially when working with children and vulnerable adults, researchers "*must take all necessary steps to reduce the sense of intrusion*" (BERA, 2004: 7). Again, it should be noted that this has also been retained in the newer edition of the BERA Guidelines (BERA 2011).

However, when I reflected on my decision not to contact this individual, I began to question its validity. This decision felt very uncomfortable, and I came to realise that this was caused by a dissonance with earlier work that I had carried out in a previous career, when I had been deeply involved with both policy and practice in relation to the protection of vulnerable adults. Indeed, I had even written formal policy guidance, as an invited external author, on the subject of consent and capacity to consent (Sherratt, 2001). I had also served for over 3 years on a local Adult Protection Committee, and had devised and published a number of training courses to aid front-line staff in decision-making when dealing with adult protection issues (eg Sherratt & Young, 2000).

The issue here, however, was not her capacity to consent, but on a more complex level, whether or not I should intrude into her life and 'bother' her with the invitation to take part in the study when she had so much else happening already, and whether, in such a vulnerable state, she might be more open to a feeling of coercion.

On the other hand, in my earlier work, I had argued that all adults, even vulnerable adults, have certain inalienable rights, and should be treated at all times as adults and not as children – thus, they have the right to self-determination, they have the right to decide for themselves, and they have the right to speak for themselves. It quickly became apparent that in deciding to withdraw this student from my study, I was guilty of repressing the individual's 'voice' and denying her the right to decide for herself (even though she had both the legal and practical capacity to consent for herself), and thus, this would also deny her the right for her views to be considered

CHAPTER 4: ETHICAL CONSIDERATIONS

within the study. This, then, was what was causing my concern, since it did not fit with my own ethical values and beliefs.

At this point, I was guided by the advice of Cohen, Manion and Morrison (2007), who opine:

“There can be no rigid rules in this context. It will be a case of formulating and abiding by one’s own situated ethics. These will determine what is acceptable and what is not acceptable”.
(Cohen, Manion and Morrison, 2007:57)

I therefore resolved to contact this individual, to openly articulate my reasons for contacting her, and to renew the offer of participation – but couched in careful terms, such that there was every opportunity for the individual to refuse.

This student had been very keen to take part in the study, and so in retrospect it is not surprising that she replied with alacrity and wished to be included. The next step, then, was to amend my research methods to accommodate her condition, since a face-to-face interview was out of the question, not least due to the possibility of infection. Furthermore, it was decided that any real-time interview, even by telephone, would probably be too exhausting, but that if the interview questions could be translated into a paper exercise, so that she could answer over a period of several days (according to her own physical state), then this would be the best way to allow full participation from this individual. This correspondence took place in July 2007. The interviews had commenced in March 2007, but were still ongoing for another few weeks, so the timing made this contribution still perfectly appropriate.

Interestingly, also in 2007, Hammersley and Traianou, writing for the BERA Teaching and Learning Research Programme, offered the view that the “autonomy” of research participants to decide for themselves whether or not to take part in a study, should be one of five key ethical principles that underpin educational research. It seems, therefore, that my stance can be justified in terms of wider literature, as well as personal values.

As noted in Section 3.7c, reconfiguring the interview into a self-administered reflective tool (or self-administered 'free-text' questionnaire) was a relatively simple operation, since I had already noted down a series of ‘prompts’ to enable me to probe as the interviews progressed. [see Appendix I]

4.8 Collegiality and Issues with Tutors

I remained confident throughout that I had considered all the possible ethical issues relating to my students, and had enacted best practice. There were, however, a number of ethical issues relating to colleagues which emerged during the study. As noted above, this led me to decide to present some of my dilemmas at the annual CARN conference (Sherratt, 2008d). I elected to go there in preference to the institutional ethics committee as I wanted to seek the views of a wider range of experienced educational researchers than would be available in a single institution. Furthermore, since the focus of my chosen conference was research ethics, it was highly likely that I would find in my audience colleagues who were highly attuned to exploring such issues. Robust debate resulted in my coming away from the conference feeling reassured that I had behaved appropriately, and had done all that I could to consider the ethics of the situation; and the arguments that were rehearsed during the conference have informed the rest of this chapter.

The three issues I explored in my paper were voluntary consent; the exploration of the practice of others as well as myself; and the protection of tutors' identities. These issues will be explored in more detail below.

In considering consent, the response of tutors warrants separate consideration. The first question here is whether colleagues have given true and freely-given consent to take part in the study, or whether they felt coerced to do so (whether consciously by me or implicitly by the situation in which we find ourselves). After all, my students had finished the course when the interviews took place, but colleagues need to work together tomorrow and thereafter. This, then, might be seen to give rise to some potential awkwardness, especially for members of a close-knit team.

Furthermore, there was, for colleagues, an additional pressure – that of the academic situation. I expressly asked for their support in undertaking a doctoral study, something which all academic colleagues are expected to value. Thus, for academics, is there really the opportunity to do or say anything that might put a barrier in the way of my achieving such an aim? On reflection, it is possible that they had no real choice whether to take part in this study, due to influence of their own academic credibility, which could be seen to suffer if they turned down such a request.

However, having offered reasons why colleagues might feel constrained to consent, it should also be borne in mind that the culture of this particular course team was pro-active and research-active in evaluating practice and aiming for constant improvements within the course. There

CHAPTER 4: ETHICAL CONSIDERATIONS

was also an element of ‘team-teaching’, whereby all colleagues could expect to be involved in all modules, to a greater or lesser extent. So having raised concerns regarding why they might agree, I now ask the converse - why should they *not* wish to take part in this project, anyway? Indeed, I might suggest that had I tried to carry out such a project without involving colleagues, I would then be guilty of denying them a ‘voice’, and the chance to express their personal and professional opinions.

Other issues regarding staff and collegiality also present themselves in this study. For example, interpersonal issues may arise, when one member of the team conducts research on the practice of the whole team, whereby colleagues may feel under threat or challenge; and more potential authority issues are raised by my role as programme leader, in terms of possible impact on the content of interviews.

As noted in Section 1.2, when I planned the study, I envisaged it as ‘practitioner research’ – I wanted to explore and improve my own practice as an online tutor. In retrospect, I admit that it had not occurred to me that I would be conducting research which might also yield possible questions or insights regarding the professional practice of others as well as myself, which resonates with the insightful commentary from Wiles and colleagues (2006), regarding the challenges of researching one’s own peers.

However, members of this course team were all established and experienced university teachers, and as reflective practitioners we should all therefore already have been used to evaluating the good and indeed the not so good in our performance, and seeking ways to improve the learning experience of our students. We should also therefore already have been well accustomed to the notion of sharing our reflections and our practice with others, in keeping with Brookfield’s (1995) proposition that critical reflection is not just an internal process, but also requires the insights (or ‘lens’) offered by colleagues. Happily, this was standard practice within this particular course team, so the involvement of colleagues as well as myself should not, therefore, be viewed as problematic.

In summary, the question must be considered: did tutors realise what would be involved when they consented to take part in my study? I had certainly not recognised that their practice would come under scrutiny along with my own – had they, likewise, been unaware of this as a potential outcome? Indeed, this raises the deeper philosophical question of whether any research

subjects ever really know *to what* they are actually consenting anyway? At this point, I am reminded of the insightful comment of Walford (2001), which sums up this challenge:

“The essence of research, after all, is concerned with the uncovering of what is not known, and that cannot be predicted in advance”. (Walford, 2001: 6)

Furthermore, this resonates with Pring's (2004) distinction between the rules and principles of ethics, and would suggest that the practice of research demands the adoption of a principles-based approach. Ultimately, therefore, there has to be an element of trust on the part of subjects, that the researcher will behave appropriately, ethically and professionally. This, then, would seem to be one of the benefits accruing to research being carried out by a member of an established and close-knit team, in a climate of trust and respect, rather than by a stranger, whose practice and values remain an unknown quantity.

4.9 Impact on Validity and Reliability

Team dynamics may have a potential impact on validity and/or reliability of data in relation to staff interviews. Barry and colleagues (1999:28) remind us of individuals' insecurities within a team environment, and in particular suggest the possibility of “... *an unwillingness to share true ideas and feelings*”.

This raises the possibility that colleagues would be less than truthful in interview, which would severely compromise the data. Furthermore, Coar and Sim (2006) had noted that interviews with professional peers were widely regarded as a test of professional knowledge, despite reassurances to the contrary, which also suggests the possibility of some impact on the content of the interview.

On the other hand, we were all fully aware that there are no ‘right answers’ as regards the practice of online facilitation (hence, to an extent, this study). It should also be noted that all students who completed the course did so successfully, and there were no accusations of malpractice or poor performance, so there is nothing to embarrass any colleagues, and no explicit or implicit criticism of their actions. Thus, their views and behaviour should be just down to professional opinion and personal style, and on these grounds, it should therefore be quite safe to assume that the data yielded by interviewing colleagues is no less accurate, valid or reliable than any other.

4.10 Anonymity and Confidentiality

In considering anonymity and confidentiality, it will be helpful to remember that Murphy and Dingwall (2003) propose that, unlike biomedical research, where potential harm is often instantaneous, the greatest risk of harm to participants in ethnographic research is at the time of publication; and although my study was not conceived as ethnography, nevertheless it has some distinct resonance with that genre, as noted above [Section 3.5]. Furthermore, we should note that, when considering anonymity and confidentiality, Walford (2005:85) considers “*ethnographic and qualitative case study research*” as a single entity. It appears, then, that particular consideration of treatment of data for publication will be warranted in this context.

In order to offer anonymity to individual subjects (students and staff), I have adopted the use of subject numbers instead of names, in all of my writing, and have coupled this with an interchangeable use of gender indicators, such that the gender of the subject cannot automatically be inferred during discussion. These actions have been intended to protect the identity of individuals. But the question remains, can I really offer anonymity? All have been interviewed by me, and thus, I know who has espoused which opinions. Furthermore, it appears, from the comments of participants, that even confidentiality is uncertain. For example, one of the student participants commented on an early conference paper arising out of this study:

“Very interesting to read the third paper from a participants perspective. I think I spotted some of the tutors, but not the participants.”

(CPD461, Message 1459, January 2008)

I found this comment both reassuring and also deeply disturbing. It was reassuring that this highly engaged individual could not recognise other students with whom he had studied, but what of the staff? The BERA guidelines (2004, 2011) state categorically that protecting the privacy, confidentiality and anonymity for all participants should be considered the norm, and they clearly state the researcher’s responsibility in respecting this right, unless specifically waived. In quoting interviews anonymously, I had intended to preserve confidentiality, and it had previously not occurred to me that participants from within the study might recognise the identity of other subjects. Here, I am reminded of the sage words of Wiles and colleagues:

“Studies conducted by academic or professional researchers of their peers raise specific ethical issues that are not distinct from those inherent in all research but which arguably place researchers in a situation where they have increased sensitivity to some ethical issues such as confidentiality”.

(Wiles et al, 2006: 284)

CHAPTER 4: ETHICAL CONSIDERATIONS

The questions this raises, therefore, are twofold - firstly the extent to which staff identities can actually be protected; and secondly, what manner of harm might ensue if anonymity cannot be entirely preserved? Those outside of the course clearly have no additional information on which to base their insights, and so I would therefore propose that it is safe to assume that the use of subject numbers and interchangeable genders should be sufficient to protect identities from external or wider disclosure.

The issue, then, is for those few people who are ‘insiders’, from the course community, who have an additional knowledge-base on which to draw, and from which to infer the identities of colleagues. However, since this is restricted to those individuals who have been part of the specific course cohort (students and staff), perhaps one might argue that the need to protect identities is less important anyway, since all have already been party to a shared experience, including the actions and inputs of all the tutors during the year, and any ensuing articulation of their own values. We should, perhaps, also remember that had I chosen to invite them to take part in focus groups instead of individual interviews, their identities would have been clearly apparent to fellow participants.

And again, we must bear in mind, as noted above, that there are no right or wrong answers, such that each tutor’s own individual practice is potentially equally valid, thus offering no opportunity for embarrassment or concern. This situation is therefore in marked contrast to that noted by social anthropologists and ethnographers over many years (see, for example, Burgess, 1985; Scheper-Hughes, 2000; van den Hoonaard, 2003; Murphy & Dingwall, 2003; Walford, 2005) where participants in qualitative research may reveal private and sometimes unpalatable beliefs, practices or other personal information during the research which would not otherwise be known to fellow members of their own community, and which, furthermore, may then cause embarrassment or even legal consequences when published by the researcher.

Ultimately, therefore, I would argue that in this particular instance, no harm will follow from tutors’ identities being guessed by a small number of student participants.

4.11 Issues of Authority and Influence on Data

My choice to study a course for mature postgraduate professionals assisted in no small way in the achievement of ethically sound and unbiased data, since both the age and experience of ‘students’ was largely comparable to that of ‘tutors’, and indeed most of the ‘students’ were

CHAPTER 4: ETHICAL CONSIDERATIONS

already clinical tutors in their own right, thus there was much less of an authority-gap than might be the case were a different (eg undergraduate) programme the subject of enquiry. Furthermore, we should, perhaps, bear in mind that Cohen, Manion and Morrison (2007:53) define research involving adults, including that of tutors and students, as essentially “*relationships between peers*”.

From previous experience with this course, I was also aware of the highly positive attitudes of my students towards research (being researchers themselves, within their own professional contexts); although reassuringly, I also have evidence that they have been careful to establish the scope and purpose of any involvement before agreeing to take part.

At this point, it is also necessary to re-consider the advantages and disadvantages of conducting the interviews myself, and the potential ethical impact that this might have on the subjects and the resulting impact on the quality of the resulting data. Clearly, it is possible that student subjects might not tell the entire truth or might tell me what they think I wanted to hear, either due to their being kind to me because they know me, or possibly because of my perceived ‘authority’ [discussed in Section 3.7].

In contrast, however, some students ‘opened up’ and said things about the course which were not always entirely favourable – and there remains the possibility that they told me because they knew me, and we were both used to giving and receiving feedback, and were comfortable with this process; whereas a complete stranger would have gained less of a response because they would not know whether they could trust her. Indeed, it might even feel disloyal to tell a stranger that the course was not always perfect! For example, one student told me he was bored by some of the face-to-face meetings – but this person is one of a number of individuals who are extremely keen on the course overall, claim it has changed their lives, and made personal recommendations to a number of subsequent candidates, (and, indeed, subsequently returned to study on my MA programme!); so although I cannot offer any proof, nevertheless I suspect this would not have been said to a stranger. I am also confident that some of the more detailed discussion around personal interactions with different tutors would definitely not have been shared without a relationship of trust.

Interestingly, Oppenheim, (1992:96) has proposed that “*poor maintenance of rapport*” between interviewer and interviewee is a major contribution to bias in interviews; and Cohen, Manion and Morrison (2007:151), acknowledging Oppenheim’s view, also note the importance of a

good rapport between interviewer and interviewee. Even more significantly, Coar and Sim (2006) note that the interviewer's identity is "influential", specifically noting the benefit of an insider being able to elicit more detailed information than someone from outside. Thus, it appears that all of these authors' views support my own proposition, that working from an established and highly positive relationship would appear to offer more advantages than disadvantages overall.

4.12 Summary

In this chapter, I have articulated and explored the ethical challenges that I have faced in carrying out and publishing this research. I have considered the issue of freely-given voluntary consent; the potential impact of my own position within the course; the level of understanding of my study by all of my participants (staff, students and the particularly vulnerable individual); and I have considered the thorny issue of maintaining anonymity and confidentiality. Ultimately, I have considered what harm might arise out of either carrying out or publishing my work, and have offered reassurance in this respect.

It must be remembered, however, that ethical considerations represent one aspect of a cohesive whole, and thus, there is an unavoidable overlap between the arguments rehearsed here and those articulated in Chapter 3, where methods and methodology are explored.

In the following chapters, I shall present a detailed analysis of the data arising out of this study, commencing with a consideration of the discussion board archive [Chapter 5], followed by an exploration of interview data [Chapters 6 and 7].

CHAPTER 5: DISCUSSION BOARD ANALYSIS

This chapter presents an analysis of the Virtual Learning Environment (VLE) discussion board archive from the PGCTLCP, the course which is my 'Case'. After summarising the demographic data, I will present some basic quantitative analysis of discussion postings and descriptive statistics; before moving on to apply a variety of taxonomies and tools to unpick the interactions between students and to identify possible influences on the part of the tutor. Finally, I will present some content analysis from discussion board postings, which offers an additional lens through which to view the earlier (and mostly quantitative) analyses.

There were no issues of inter-rater reliability to overcome, since all analysis and coding for this study was carried out by a single researcher (myself). However, the analysis has been carried out as an iterative process, rather than in a single phase of work, in order to ensure the robustness and trustworthiness.

5.1 Demographic data

5.1a *Students*

As noted earlier [Section 3.3c], the PGCTLCP cohort for this study comprised of 33 students, divided into four Learning Sets [three groups of 9 students, and 1 group of 6 students]. Note that the reason for the variation in group size has already been discussed in Section 3.3d.

The age range was 26-54; with a mean of 40; and a median of 38. There were two outliers at each end of scale (one male and one female in each case), and everyone else was located within the 30-50 age range, which is entirely predictable for this type of course, being a professional development programme, and thus potentially also a career-enhancing opportunity, for already-established and fairly senior clinical professionals.

There were 18 females and 15 males in the cohort; and their clinical professions were spread across four groupings, as follows: 15 doctors; 5 dentists; 7 nurses; and 6 allied health professions. The nurses were all female, but the allied health professions, dentists and doctors were fairly well balanced between genders. This information is summarised in Tables 5.1 and 5.2, overleaf:-

CHAPTER 5: DISCUSSION BOARD ANALYSIS

	FEMALE	MALE	TOTAL
Learning Set A	5	4	9
Learning Set B	5	4	9
Learning Set C	5	4	9
Learning Set D	3	3	6
TOTAL	18	15	33

Table 5.1: Gender of students in each Learning Set

	Doctors	Dentists	Nurses	Allied Health Professions	Total
Learning Set A	4	1	2	2	9
Learning Set B	4	1	2	2	9
Learning Set C	5	2	1	1	9
Learning Set D	2	1	2	1	6
TOTALS	15	5	7	6	33

Table 5.2: Profession of students in each Learning Set

5.1b Tutors

There were 5 tutors for this cohort, 3 female and 2 male. As might be expected, their age range was slightly older, although overlapping the ages of the students, being 44-63. There was also a learning technologist attached to the programme, who was present at some face-to-face sessions and also present online. She used her own identity when making online postings personally, for example, giving technical advice, but utilised a shared, generic 'CPD Tutors' identity for other aspects of administration and course organisation, such as announcements and postings within the 'General' discussion board. The content and syllabus of each module contained pre-defined discussion topics which all Learning Sets were expected to address. The 'CPD Tutors' generic identity was also used to set out the start of each formally designated discussion topic for Module 1 within the Learning Set Discussion Boards, in order to provide some additional scaffolding and structure at the start of the programme.

However, the scaffolding provided by having each of the discussion threads started by 'CPD Tutors' was only present in Module 1, as a demonstration of the use of online discussion threads. It should also be noted that discussions were not limited to these pre-defined topics, and

students were also encouraged to start their own discussion threads on additional topics of interest during each module.

5.2 Quantitative data

5.2a Learning Sets

It is important, first of all, to understand the relative frequency of posting and general engagement of the four PGCTLCP Learning Sets, before attempting to characterise the type of engagement evidenced by each group. These descriptive quantitative data are therefore presented in this section.

As already noted, the Learning Sets differed slightly in size [see Table 5.1], and so to aid comparison between the groups, the actual figures have been scaled on a per-capita basis, to normalise the data into evenly-sized groups. The total number of student postings on the online Discussion Board, for all Learning Sets, is presented in Table 5.3 and Figure 5.1:

TOTAL NUMBER OF STUDENT POSTINGS ON ALL DISCUSSION BOARDS [NORMALISED GROUPS]			
	MODULE 1	MODULE 2	MODULE 3
LEARNING SET A	63	80	73
LEARNING SET B	199	224	200
LEARNING SET C	79	159	96
LEARNING SET D	81	122	83

Table 5.3: Number of Discussion Board postings for all Learning Sets, throughout the year

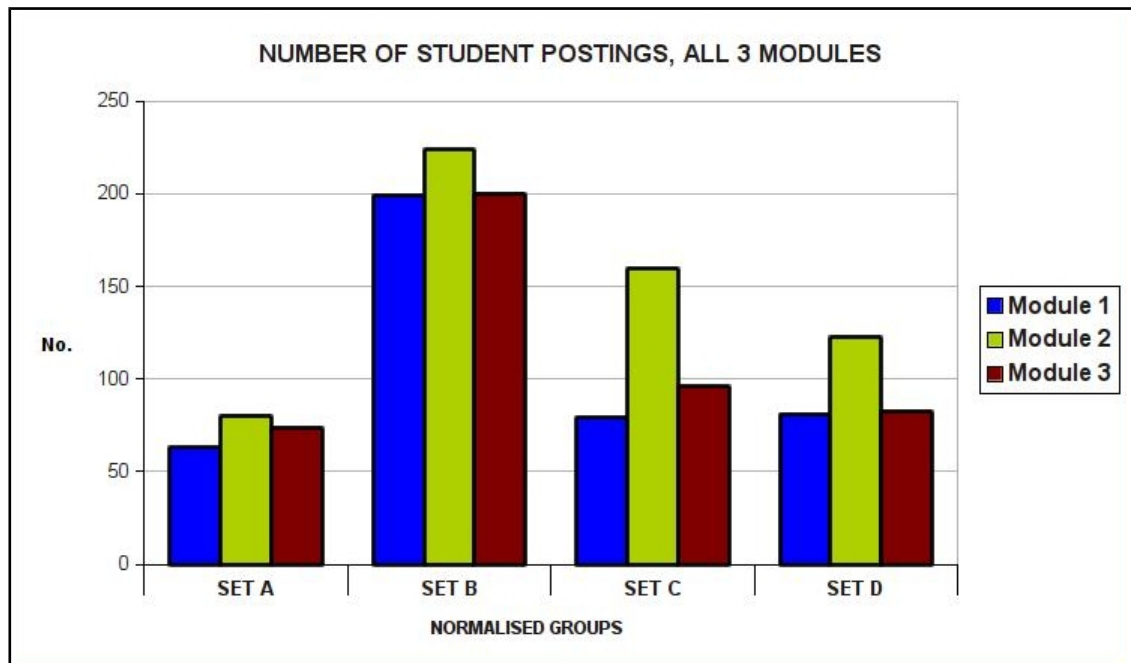


Figure 5.1: Total number of student postings, throughout the year

Thus, it can be seen that all four Learning Sets peaked in the second module (albeit only marginally for Learning Set A), and then tailed off again towards the end. It is also clear that Learning Set B was consistently far more verbose than any of other group, despite having a 'lurker' in Module 1 who engaged in other ways (eg: reading), but did not make a single posting, which brings down the average from 25 postings per person, for a group of 8, to only 22 for the full group of 9 [see Table 5.4].

AVERAGE NUMBER OF STUDENT DISCUSSION POSTINGS [PER CAPITA]			
	MODULE 1	MODULE 2	MODULE 3
LEARNING SET A	7	9	8
LEARNING SET B	22	25	22
LEARNING SET C	9	18	11
LEARNING SET D	9	14	9

Table 5.4: Average number of Discussion Board postings, per capita

CHAPTER 5: DISCUSSION BOARD ANALYSIS

However, these figures include postings to the 'General' (cohort-wide) discussion board, as well as the Learning Set 'Activities' area, which was the officially designated location for academic discussions, both of the pre-defined topics and also of any student-initiated discussions. Thus, if we consider only the interaction within each Learning Set, then a clearer picture of group dynamics and potential learning activity should emerge. Therefore, the totals for Learning Set interactions (again, scaled into normalised groups, to aid comparison), are shown in Tables 5.5a and 5.5b, and summarised in Figure 5.2:

NUMBER OF STUDENT POSTINGS ON DISCUSSION BOARDS [NORMALISED GROUPS, ACTIVITIES ONLY]			
	MODULE 1	MODULE 2	MODULE 3
LEARNING SET A	60	75	71
LEARNING SET B	194	222	191
LEARNING SET C	62	144	78
LEARNING SET D	80	117	81

Table 5.5a: Number of Discussion Board postings for all Learning Sets, excluding 'General' board

AVERAGE NUMBER OF STUDENT POSTINGS ON DISCUSSION BOARD [PER CAPITA, ACTIVITIES ONLY]			
	MODULE 1	MODULE 2	MODULE 3
LEARNING SET A	7	8	8
LEARNING SET B	22	25	21
LEARNING SET C	7	16	9
LEARNING SET D	9	13	9

Table 5.5b: Average number of Discussion Board postings, per capita, excluding 'General' board

Although both the overall numbers and averages change slightly, it can be seen from Figure 5.2 [overleaf] that the shape of overall profile for each group remains largely consistent, regardless

CHAPTER 5: DISCUSSION BOARD ANALYSIS

of whether postings from the 'General' discussion area are included, or whether the focus is purely on the Learning Set Activities.

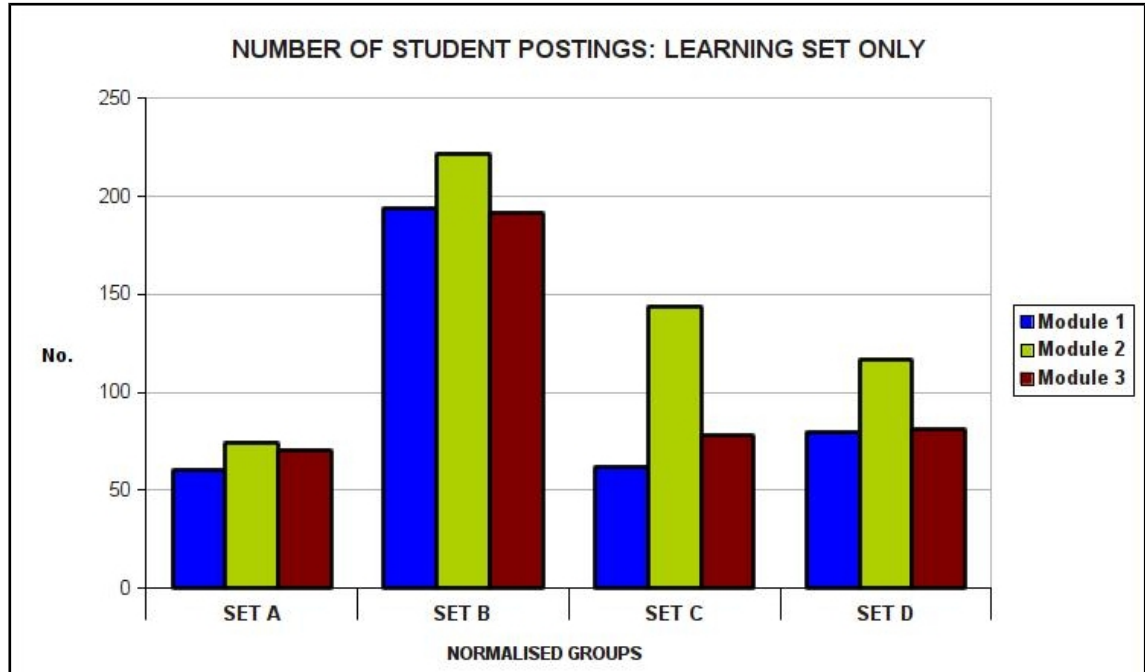


Figure 5. 2: Number of student postings, excluding 'General' discussion board

Thus, vastly differing levels of activity can be clearly observed for each group. There is, perhaps unsurprisingly, also evidence that these differences in activity level are statistically significant in all modules, at a 0.01 significance level, with χ^2 values of **124.00**, **82.39**, and **93.66** respectively, clearly disproving the Null Hypothesis (H_0) that there is no difference between the groups, as shown in Tables 5.6a – 5.6c, below:

	Observed	Expected	Residual	Residual Sq.	Res. Sq. /Exp.
Set A	60	99	-39.00	1521.00	15.36
Set B	194	99	95.00	9025.00	91.16
Set C	62	99	-37.00	1369.00	13.83
Set D	80	99	-19.00	361.00	3.65
Total	396				124.00

Table 5.6a: Chi-Square for Goodness of Fit, Total Postings, Module 1

CHAPTER 5: DISCUSSION BOARD ANALYSIS

	Observed	Expected	Residual	Residual Sq.	Res. Sq. /Exp.
Set A	75	139.5	-64.50	4160.25	29.82
Set B	222	139.5	82.50	6806.25	48.79
Set C	144	139.5	4.50	20.25	0.15
Set D	117	139.5	-22.50	506.25	3.63
Total	558				82.39

Table 5.6b: Chi-Square for Goodness of Fit, Total Postings, Module 2

	Observed	Expected	Residual	Residual Sq.	Res. Sq. /Exp.
Set A	71	105.25	-34.25	1173.06	11.15
Set B	191	105.25	85.75	7353.06	69.86
Set C	78	105.25	-27.25	742.56	7.06
Set D	81	105.25	-24.25	588.06	5.59
Total	421				93.66

Table 5.6c: Chi-Square for Goodness of Fit, Total Postings, Module 3

Therefore it is also important to identify the types of posting occurring within the Learning Set Activities, to shed further light on the differences between the Learning Sets, and this will be addressed later in this chapter, in Sections 5.3 and 5.4.

5.2b Individual students: Peer facilitators

As identified in Section 3.2b, and in other prior work, I have observed the importance of what we have called “peer facilitators” (Sherratt & Sackville, 2006a; Sherratt, 2009a). These are students from within the group, who voluntarily and pro-actively take on a purely informal facilitative role. When the discussion board is observed, the facilitating actions from these peer volunteers can clearly be seen to have a different impact than interventions from tutors, and thus, the dynamic created within the group is also different. The presence of these 'peer facilitators' has been identified as beneficial, and the potentially significant advantages of achieving peer-to-peer dialogue have also been discussed elsewhere (Sherratt, 2009a).

CHAPTER 5: DISCUSSION BOARD ANALYSIS

The individual students who contributed (often substantially) more than the expected single posting for each activity can be regarded as potentially fulfilling this 'peer facilitator' role, as can those students who were brave enough to make the first response to any activity. However, there is a need both for initiating and also sustaining the conversation, and so those students who asked questions in response also have a necessary role to play. This is explored further in Section 5.3, when posting styles are explored, and again in Chapter 8.

As noted previously (Sherratt & Sackville, 2006a), a single peer facilitator can have an impact on the group, but those groups which have more than one person prepared to take on this role seem to fare much better in the achievement of dialogue and ongoing interaction, since there is someone to step in and continue whenever the first facilitator tires, and they can also 'feed' off each other to generate dialogue with which other group members could then engage. Thus, this could imply that as little as a single posting from a single individual could potentially make a difference, by acting as the catalyst for the rest of the group, although I would suggest that one would normally expect to see greater evidence of engagement for an individual to stand out as a 'peer facilitator'.

It is important, however, that these individuals who act as 'peer facilitators' do not post too much and come to dominate the discussion board, since that would lead simply to monologues or perhaps to 'duo-logues' (or one-to-one conversations), inhibiting other group members from joining in to achieve dialogue within the group as a whole, and thus also hindering the social construction of knowledge. This can, perhaps, be regarded as somewhat similar to the findings of Mazzolini and Maddison (2003a) that more postings from the formal facilitator [instructor] led to fewer postings from students. This is explored in Section 5.4a; and the views of the students regarding this potential phenomenon are explored in Chapter 6.

There was a wide discrepancy in levels of online discussion board activity between the most and least active students, and also a clearly observable range of activity within each Learning Set. From Table 5.7 [overleaf], it can be seen that the greatest discrepancy was found in Learning Set B, with one individual apparently at risk of dominating the discussion board; whereas the other three groups had a more even distribution of activity.

There was, however, a good range of individuals who initiated at least one thread, and interestingly this also included some of the less active discussants in all groups. A total of 5 out of the 9 students (56%) in Learning Set A did so at some point in the year, whilst 7 out of 9

CHAPTER 5: DISCUSSION BOARD ANALYSIS

(78%) did so in Learning Set B (remembering also that one member of Learning Set B was a 'lurker' who posted nothing); while 6 out of 9 (67%) started threads in Learning Set C, and 5 out of 6 (83%) from Learning Set D also did so at least once during the year.

	Module 1		Module 2		Module 3	
No. of postings:	Most Active	Least Active	Most Active	Least Active	Most Active	Least Active
LEARNING SET A	10	3	13	2	10	5
LEARNING SET B	50	0	61	11	53	8
LEARNING SET C	15	3	21	7	16	1
LEARNING SET D	11	7	15	10	11	8

Table 5.7: Number of postings made by the most and least active members of each Learning Set

5.2c Tutor postings

The number of tutor postings varied quite considerably with different groups and throughout the year, and these are summarised in Table 5.8. Note, however, that the style of tutor postings will be analysed separately, in Sections 5.3c and 5.5.

	Module 1	Module 2	Module 3
Tutor 1	10	2	4
Tutor 2	15	5	14
Tutor 3	5	5	6
Tutor 4	6	18	0
Tutor 5	7	31	41
'CPD Tutors' Generic ID	24	0	0
Notes: 'CPD Tutors' ID was used to scaffold the Discussion Board structure in Module 1. Tutor 5 was not allocated to any of the Learning Sets in Module 1. Tutor 1 was not allocated to any of the Learning Sets in Modules 2 or 3. Tutor 4 was absent in Module 3 (covered by Tutor 3)			

Table 5.8: Number of Discussion Board postings by tutors, throughout the year

Not all tutors took responsibility for a Learning Set in every module; whilst Tutor 3 split her involvement between 2 groups, to cover for an absent colleague in Module 3. However, some

CHAPTER 5: DISCUSSION BOARD ANALYSIS

tutors also communicated with all groups, or with groups not specifically their own (for example, Tutors 1 and 5) which added to the overall tutor contact experienced by students during the year.

Thus, it appears that the Tutors can be characterised as 'highly active' [Tutor 5], 'moderately active' [Tutors 1 and 2] or 'less active' [Tutors 3 and 4]. Interestingly, this mirrors the differences shown by the Learning Sets. However, this cannot be seen as either cause or effect, due to the movement of tutors between groups during the year. For example, Learning Set A spent one module with a moderately active tutor, one with a highly active tutor and one with a less active tutor. The number of postings remained fairly consistent for this group throughout the year, and so it appears that the level of activity from the tutor had no impact on the volume of postings.

It is interesting to observe that Tutor 2 made substantially fewer postings in Module 2 than in either of the other modules, despite being attached to a Learning Set in all 3 modules [see Table 5.8], indicating a marked change in behaviour.

Meanwhile, it is also notable that the five tutors made postings of substantially differing lengths, as shown in Table 5.9 [below]:

Tutor	Length of postings (in words)								
	Module 1			Module 2			Module 3		
	Most	Least	Mean	Most	Least	Mean	Most	Least	Mean
Tutor 1	223	32	107	70	21	46	103	40	58
Tutor 2	335	32	142	410	17	235	273	36	142
Tutor 3	89	15	54	111	53	86	148	88	122
Tutor 4	62	17	43	91	22	45	0	0	0
Tutor 5	84	45	62	287	25	94	248	26	98
Notes: Tutor 5 was not allocated to any of the Learning Sets in Module 1. Tutor 1 was not allocated to any of the Learning Sets in Modules 2 or 3. Tutor 4 was absent in Module 3 (covered by Tutor 3).									

Table 5.9: Length of tutor postings (in words) throughout the year

Thus, it can be seen that Tutor 1 and Tutor 5 made a lot more postings when they were directly responsible for a Learning Set, and these two tutors also maintained a quite well matched

CHAPTER 5: DISCUSSION BOARD ANALYSIS

overall profile during these modules (*ie.* Module 1 for Tutor 1, and Modules 2 and 3 for Tutor 5). In contrast, Tutor 3 steadily gained in the length of her postings during the year, whereas Tutor 4 also maintained a very steady, albeit lower overall posting profile in the two modules he was involved in.

Meanwhile, it is of particular interest that Tutor 2 differed substantially from her colleagues, making some extremely long postings (greater by far than any of the other tutors, and also with a much greater average). This was especially apparent for Module 2, again indicating something of a change in behaviour, as compared to her profile in the other two modules.

The different ways that tutors presented their postings is also of interest, since it offers a further window onto their overall styles of engagement with their learners. A particularly good example can be found in their varied use of salutations (SAL), valedictions (VAL) and vocatives (VOC) within discussion board postings as shown in Table 5.10 [below]. It should be noted that these are also features of the 'Cohesive' element of 'Social Presence' within a Community of Inquiry (Garrison et al, 2000), and this is discussed further in Section 5.4.

Number of instances:	Module 1			Module 2			Module 3		
	Sal.	Val.	Voc.	Sal.	Val.	Voc.	Sal.	Val.	Voc.
Tutor 1	5	10	2	1	2	0	1	1	1
Tutor 2	3	14	4	2	5	1	0	9	6
Tutor 3	0	5	0	0	5	1	0	6	0
Tutor 4	0	2	0	0	3	0	0	0	0
Tutor 5	7	7	1	27	31	5	33	40	15

Table 5.10: Number of salutations, valedictions and vocatives in tutor postings, all year

Thus, it can be seen that Tutors 1 and 5 also made more personalised postings when they had responsibility for a Learning Set, as well as posting more frequently, although Tutor 5 was considerably more active in her discussion boards and also made very substantial use of both salutations and valedictions, possibly indicating a somewhat conversational style to her postings. Tutor 2 sometimes utilised salutations, and made regular use of valedictions throughout the year, with occasional use of vocatives, evidencing an overall approach quite similar to that of Tutor 1. In contrast, however, Tutors 3 and 4 did not favour the use of either

salutations or vocatives (neither using any of the former and only one of the latter), but they did make some use of valedictions. This seems to indicate a more remote style of posting, albeit with some attempts to add a slight personal element by their regular use of valedictions.

Thus, a picture starts to emerge whereby Tutors 3 and 4 seemingly engaged with the online discussion board and with their learners in a different way than Tutors 1, 2 or 5. This is explored further in Sections 5.3c and 5.5.

5.3 Sackville & Sherratt Typology

In this section, the content of the discussion board archive is analysed in order to establish the 'flow' of discussion, and presence (or absence) of true dialogue. As discussed in Chapter 3, we had already devised a Typology of Online Responses in earlier work (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a), to identify the patterns of interaction in online discussion. The indicators of this typology are shown in Figure 5.3:

Statement	A view expressed. A 'closed' statement. Not inviting response or comparison. A position statement.
Limited response	Refers back to an earlier posting, but only in a limited way. May be encouragement, <i>eg</i> : "Yes – I agree".
Questioning response	Opens up the topic. Expands on ideas. Makes comparisons.
Dialogue	Building on ideas, taking them further, introducing new interpretations, joint problem-solving, disagreements and disputes.
Other	Solely social interaction or technical support. (not academic in nature).

Figure 5.3: Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

5.3a Characterising group interactions

This typology has been applied to the PGCTLCP discussion board archive, and the results for each Learning Set in the individual modules are presented in Tables 5.11a – 5.11c [overleaf], from which it is apparent that the different Learning Sets favoured the use of 'Statement', 'Limited Response', 'Questioning Response', 'Dialogue', and 'Other' to differing extents.

The unit of analysis is a single message, as discussed in Section 3.8c. However, as above, it should be noted that the raw figures have been scaled, to normalise into even-sized groups, in

CHAPTER 5: DISCUSSION BOARD ANALYSIS

order to aid comparison between the groups. Note also that percentages have been rounded to the nearest whole number.

MODULE 1 [NORMALISED GROUPS]						
	Statement	Limited Response	Questioning Response	Dialogue	Other	Total
Learning Set A	40 67%	14 23%	3 5%	2 3%	1 2%	60
Learning Set B	22 11%	30 15%	40 21%	34 18%	68 35%	194
Learning Set C	23 37%	11 18%	15 24%	8 13%	5 8%	62
Learning Set D	36 45%	14 17%	12 15%	4 5%	14 17%	80

Table 5.11a: Analysis of Module 1 Discussion Board, using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

MODULE 2 [NORMALISED GROUPS]						
	Statement	Limited Response	Questioning Response	Dialogue	Other	Total
Learning Set A	41 55%	17 23%	12 16%	5 7%	0	75
Learning Set B	44 20%	38 17%	24 11%	64 29%	52 23%	222
Learning Set C	42 29%	44 31%	22 15%	17 12%	19 13%	144
Learning Set D	54 46%	33 28%	14 12%	9 8%	7 6%	117

Table 5.11b: Analysis of Module 2 Discussion Board, using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

MODULE 3 [NORMALISED GROUPS]						
	Statement	Limited Response	Questioning Response	Dialogue	Other	Total
Learning Set A	45 63%	18 25%	7 10%	0	1 1%	71
Learning Set B	29 15%	36 19%	26 14%	60 31%	40 21%	191
Learning Set C	25 32%	18 23%	9 12%	9 12%	17 22%	78
Learning Set D	47 58%	18 22%	7 9%	2 2%	7 9%	81

Table 5.11c: Analysis of Module 3 Discussion Board, using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

Calculations of χ^2 **Goodness of Fit** [see Tables 5.12a – 5.12e] indicated values for 'Statement' of **8.22**, **2.35**, and **10.16** respectively, showing evidence of difference, to a significance level of 0.05, in modules 1 and 3 only; while the χ^2 values for 'Limited Response' were **12.91**, **12.19** and **10.80** respectively, showing evidence of difference in all modules, at a 0.01 significance level. Similar to the findings for 'Statement', we find that the χ^2 values for 'Questioning Response' of **43.03**, **5.78**, and **20.79** showed evidence of significant difference only in modules 1 and 3. Whereas the χ^2 values for 'Dialogue' of **55.33**, **94.09**, and **136.61** showed clear evidence of difference at a significance level of 0.01 in all modules; as did the χ^2 values for 'Other' of **132.27**, **81.69**, and **54.32**, again at a 0.01 significance level. Despite some variations, overall, this suggests that the four Learning Sets did indeed behave significantly differently throughout the course of the year. These χ^2 Goodness of Fit calculations are shown in Tables 5.12a – 5.12e below:-

		Observed	Expected	Residual	Residual Sq.	Res. Sq. / Exp.
Module 1	Set A	40	30.3	9.8	95.06	3.14
	Set B	22	30.3	-8.3	68.06	2.25
	Set C	23	30.3	-7.3	52.56	1.74
	Set D	36	30.3	5.8	33.06	1.09
	Total	121				8.22
Module 2	Set A	41	45.25	-4.25	18.06	0.40
	Set B	44	45.25	-1.25	1.56	0.03
	Set C	42	45.25	-3.25	10.56	0.23
	Set D	54	45.25	8.75	76.56	1.69
	Total	181				2.35
Module 3	Set A	45	36.5	8.50	72.25	1.98
	Set B	29	36.5	-7.50	56.25	1.54
	Set C	25	36.5	-11.50	132.25	3.62
	Set D	47	36.5	10.50	110.25	3.02
	Total	146				10.16

Table 5.12a: Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Statement' in all modules

CHAPTER 5: DISCUSSION BOARD ANALYSIS

		Observed	Expected	Residual	Residual Sq.	Res. Sq. / Exp.
Module 1	Set A	14	17.25	-3.25	10.56	0.61
	Set B	30	17.25	12.75	162.56	9.42
	Set C	11	17.25	-6.25	39.06	2.27
	Set D	14	17.25	-3.25	10.56	0.61
	Total	69				12.91
Module 2	Set A	17	33	-16.00	256.00	7.76
	Set B	38	33	5.00	25.00	0.76
	Set C	44	33	11.00	121.00	3.67
	Set D	33	33	0.00	0.00	0.00
	Total	132				12.19
Module 3	Set A	18	22.5	-4.50	20.25	0.90
	Set B	36	22.5	13.50	182.25	8.10
	Set C	18	22.5	-4.50	20.25	0.90
	Set D	18	22.5	-4.50	20.25	0.90
	Total	90				10.80

Table 5.12b: Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Limited Response' in all modules

		Observed	Expected	Residual	Residual Sq.	Res. Sq. / Exp.
Module 1	Set A	3	17.5	-14.5	210.25	12.01
	Set B	40	17.5	22.5	506.25	28.93
	Set C	15	17.5	-2.5	6.25	0.36
	Set D	12	17.5	-5.5	30.25	1.73
	Total	70				43.03
Module 2	Set A	12	18	-6.00	36.00	2.00
	Set B	24	18	6.00	36.00	2.00
	Set C	22	18	4.00	16.00	0.89
	Set D	14	18	-4.00	16.00	0.89
	Total	72				5.78
Module 3	Set A	7	12.25	-5.25	27.56	2.25
	Set B	26	12.25	13.75	189.06	15.43
	Set C	9	12.25	-3.25	10.56	0.86
	Set D	7	12.25	-5.25	27.56	2.25
	Total	49				20.79

Table 5.12c: Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Questioning Response' in all modules

CHAPTER 5: DISCUSSION BOARD ANALYSIS

		Observed	Expected	Residual	Residual Sq.	Res. Sq. / Exp.
Module 1	Set A	2	12	-10.00	100.00	8.33
	Set B	34	12	22.00	484.00	40.33
	Set C	8	12	-4.00	16.00	1.33
	Set D	4	12	-8.00	64.00	5.33
	Total	48				55.33
Module 2	Set A	5	23.75	-18.75	351.56	14.80
	Set B	64	23.75	40.25	1620.06	68.21
	Set C	17	23.75	-6.75	45.56	1.92
	Set D	9	23.75	-14.75	217.56	9.16
	Total	95				94.09
Module 3	Set A	0	17.75	-17.75	315.06	17.75
	Set B	60	17.75	42.25	1785.06	100.57
	Set C	9	17.75	-8.75	76.56	4.31
	Set D	2	17.75	-15.75	248.06	13.98
	Total	71				136.61

Table 5.12d: Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Dialogue' in all modules

		Observed	Expected	Residual	Residual Sq.	Res. Sq. / Exp.
Module 1	Set A	1	22	-21.00	441.00	20.05
	Set B	68	22	46.00	2116.00	96.18
	Set C	5	22	-17.00	289.00	13.14
	Set D	14	22	-8.00	64.00	2.91
	Total	88				132.28
Module 2	Set A	0	19.5	-19.50	380.25	19.50
	Set B	52	19.5	32.50	1056.25	54.17
	Set C	19	19.5	-0.50	0.25	0.01
	Set D	7	19.5	-12.50	156.25	8.01
	Total	78				81.69
Module 3	Set A	1	16.25	-15.25	232.56	14.31
	Set B	40	16.25	23.75	564.06	34.71
	Set C	17	16.25	0.75	0.56	0.03
	Set D	7	16.25	-9.25	85.56	5.27
	Total	65				54.32

Table 5.12e: Chi-Square for Goodness of Fit, Learning Sets' Favour of 'Other' in all modules

A summary of the results for analysis of the whole cohort throughout the year, utilising the 'Typology of Online Responses' (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a) is presented summarised graphically in Figure 5.4, overleaf.

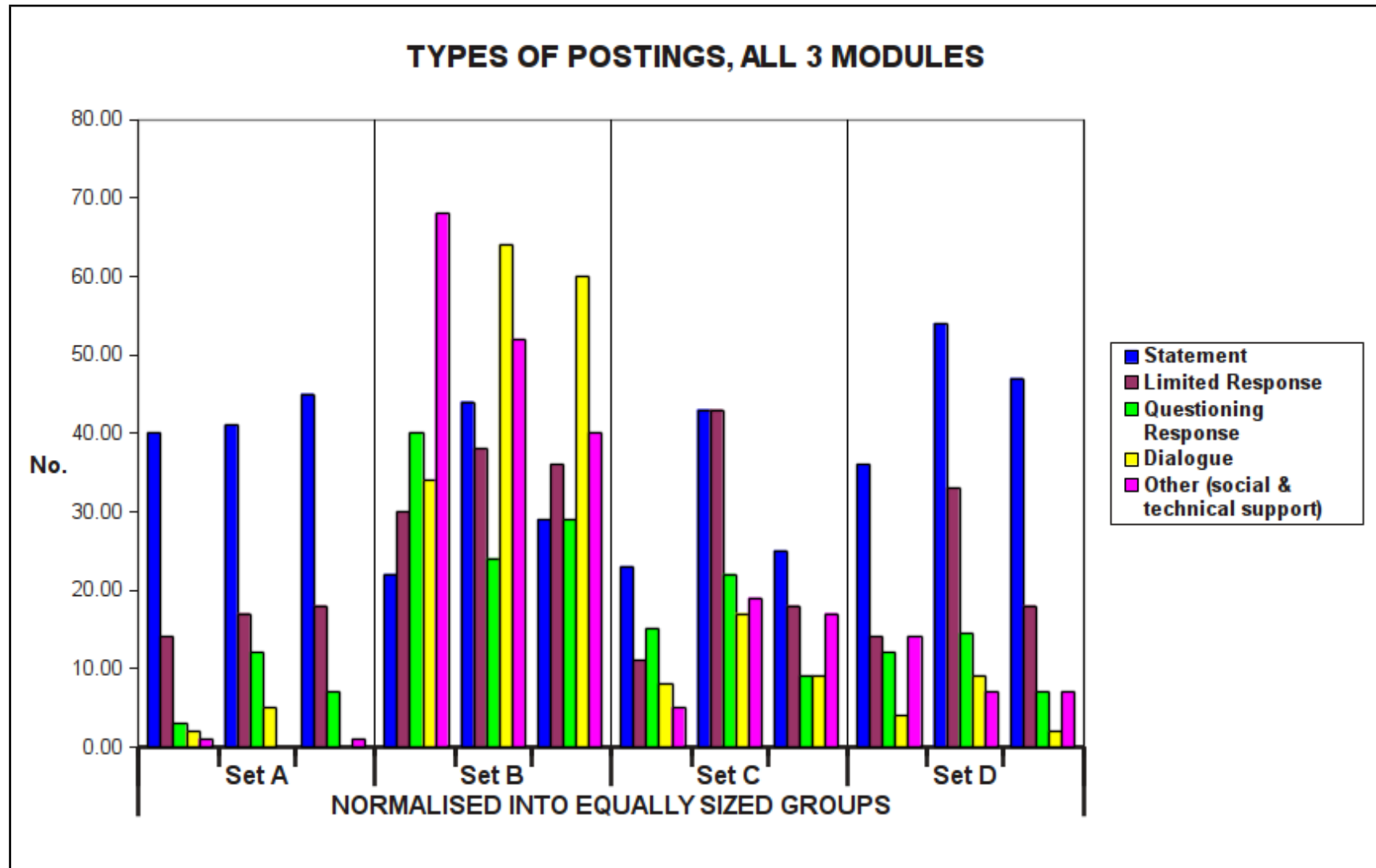


Figure 5.4: Types of posting, analysed using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

From this analysis, it is clear that Learning Set A maintained a fairly even profile in type of response (except for a lack of Dialogue in Module 3, which will be addressed later in this Section); and Learning Set D also maintained a fairly even profile in type of response, albeit with the overall number of postings being slightly higher in Module 2.

For Learning Set B, however, it is noticeable that the amount of 'Dialogue' was markedly higher in both the second and third modules, while 'Other' postings fell module by module, possibly indicating that what had started as conversations of a social or supportive nature have become, over time, interactions of a more academic nature. This resonates with the finding of Abedin and colleagues (2014) that non-task social interactions happen most frequently in the first few weeks of a course.

It is also consistent with Arbaugh's (2004) proposition that students need to take at least two online courses (*ie* modules of a programme) to fully settle into being an online learner. Indeed, it is noticeable that all four Learning Sets show an increase of 'Dialogue' (demonstrating the move towards academic rather than purely social discussion) in the second module, further supporting Arbaugh's (*ibid.*) proposition.

Indeed, the highly engaged profile for Learning Set B, even in Module 1, would tend to suggest that the existence of a 'lurker' did not have an adverse impact on the formation of a learning community, in distinct contrast to the propositions of Goodfellow and Hewling (2005) and Nagel and colleagues (2009) that 'lurkers' have a negative influence, discussed in detail in Chapter 2. It appears, then, that other members of the group were either unconcerned, or possibly unaware of her existence, and this is explored further during analysis of student interviews [Chapter 6].

Learning Set C is interesting, in that the number of postings rose substantially in the second module, most noticeably 'Limited Response' and also 'Other' postings, representing a growing level of acknowledgement and interaction between group members, especially for social and technical support. This suggests that a community may have been starting to form, albeit slowly. For Learning Sets B and D, there is also an increase in 'Limited Response'. However, in contrast, these sets experienced a drop in 'Other' postings during the year.

Learning Set A had only a single 'Other' posting in the final module and do not seem to evidence social or technical support during the year (a single posting in Modules 1 and 3, and a complete

CHAPTER 5: DISCUSSION BOARD ANALYSIS

dearth in Module 2). This is especially interesting since social postings have been identified as necessary for the formation of a community (Garrison et al, 2000; Dixon et al, 2006). It also indicates a substantial difference in how the groups functioned.

Another feature of Learning Set A is their observed failure to achieve 'Dialogue' at all in the final module, although the number of postings remained fairly constant, and they had achieved 'Dialogue' in both the earlier modules. In contrast, Learning Sets C and D did manage to achieve some 'Dialogue', even for the final module, the overall number of postings being similar, indicating a distinct difference in the way that this particular group functioned.

Thus, we can see that there was one group whose interaction could be characterised as 'high' [Learning Set B], two groups whose interaction might be regarded as 'moderate' [Learning Sets C and D], and one where the interaction can undoubtedly be seen to be 'low' [Learning Set A]. This difference in culture and group dynamics is particularly interesting since the groups were allocated in advance by the Programme Leader, thus no element of choosing group members based on personality or like-mindedness could account for this difference. Similarly, the spread of disciplines was fairly consistent, with all professions represented in each group, and a largely even gender balance was also maintained [see Tables 5.1 and 5.2], which cannot, therefore, account for the differences.

Indeed, since the students remained in the same groups, and the course content was the same for all Learning Sets, two possible reasons for the lack of observable 'Dialogue' for Learning Set A seem worth further consideration. Firstly, the loss, or subsequent return of a student who was not present for all three modules might have had some influence on overall group dynamics, and hence on the group posting profile. The possible impact of individuals on the group profile is explored further in Section 5.3b. The second alternative and quite attractive proposition is that this difference in the levels of 'Dialogue' achieved by this set in the three modules might be attributable to the different amounts or styles of intervention of the various tutors who supported this group. This group had what can be classed as a 'moderately active' facilitator in Module 1, and they achieved some dialogue; a 'highly active' facilitator in Module 2, achieving a slightly greater proportion of Dialogue; but where they failed to achieve Dialogue at all, they were supported by a 'less active' Tutor. This seems to resonate with the proposition of Garrison and Cleveland-Innes (2005) regarding the tutor's leadership role in online discussion, and is explored further in Section 5.5. It is also considered in relation to the students' own accounts of their experiences in Chapters 6 and 8.

5.3b Impact of individual students

A particularly interesting feature of analysis utilising the Sackville and Sherratt (2006) taxonomy is the ability to characterise not just groups but also individual students, to identify the potential impact of that individual on the level of overall group interaction.

For example, in Learning Set A, only 4 out of 9 students (44%) made any 'Dialogue' postings during the year compared with 8 out of 9 in Learning Set B (*ie* everyone except the lurker), 4 out of 9 (44%) of Learning Set C, achieving some 'Dialogue', and Learning Set D, 5 out of the 6 students (83%) [see Figures 5.5a - 5.5d, overleaf].

It can be seen from Figures 5.5a - 5.5d that this largely matches the level of overall activity and interaction on the part of individual students, such that, for example, the same 4 students from Learning Set C who achieved Dialogue in Module 2 were also responsible for 78% of the total postings in that module, as compared to the much more even spread right across Learning Sets B and D.

It is noteworthy that Learning Sets A and C had similar profiles in terms of the number of postings, and in the proportion of the group who engaged in 'Dialogue'. However, there was a marked difference in all 3 modules between the overall group profiles, with members of Learning Set A substantially favouring the 'Statement', as compared to Learning Set C, whose profile was more evenly spread across all posting types [see Figure 5.4, above].

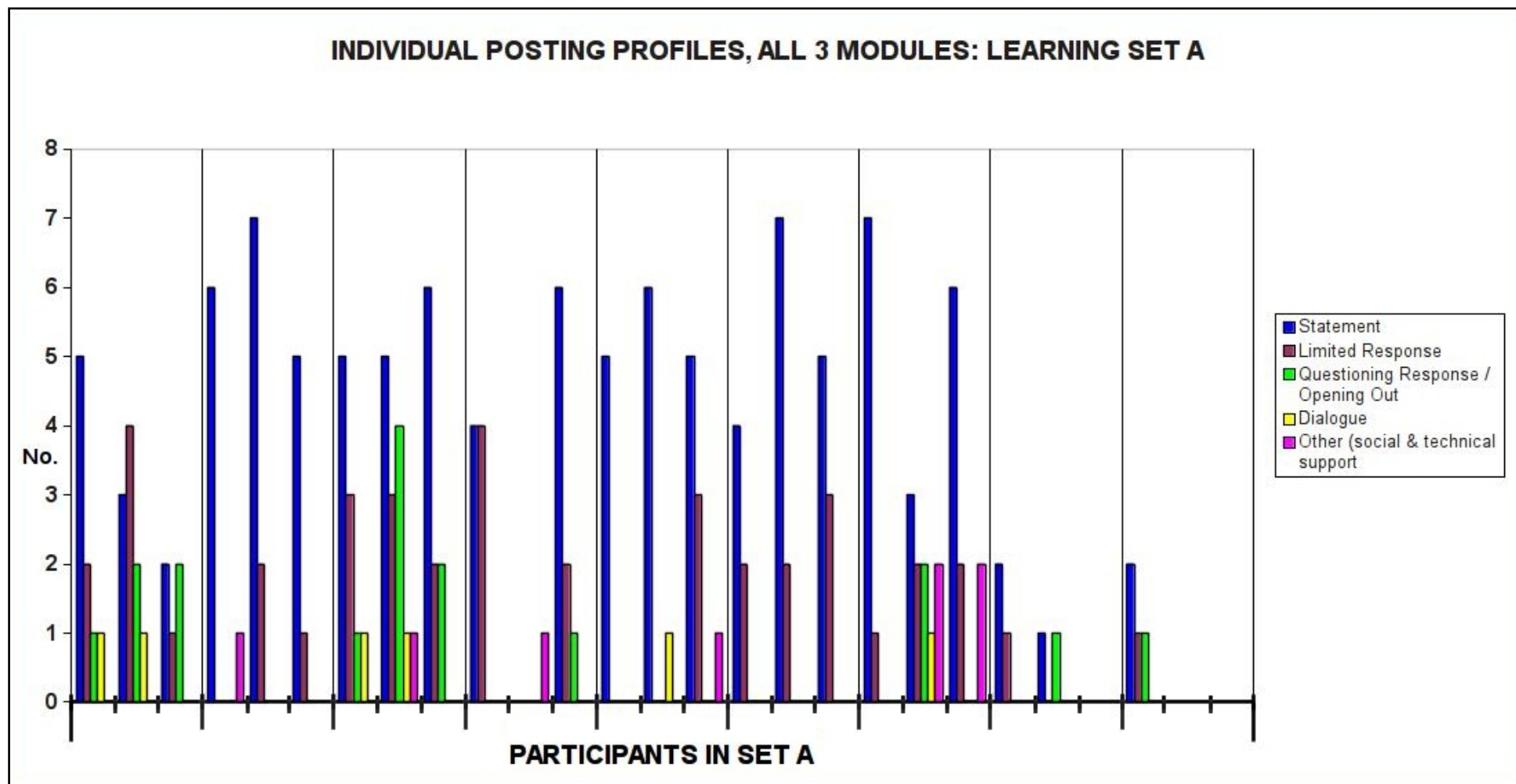


Figure 5.5a: Individual student profiles, Learning Set A, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

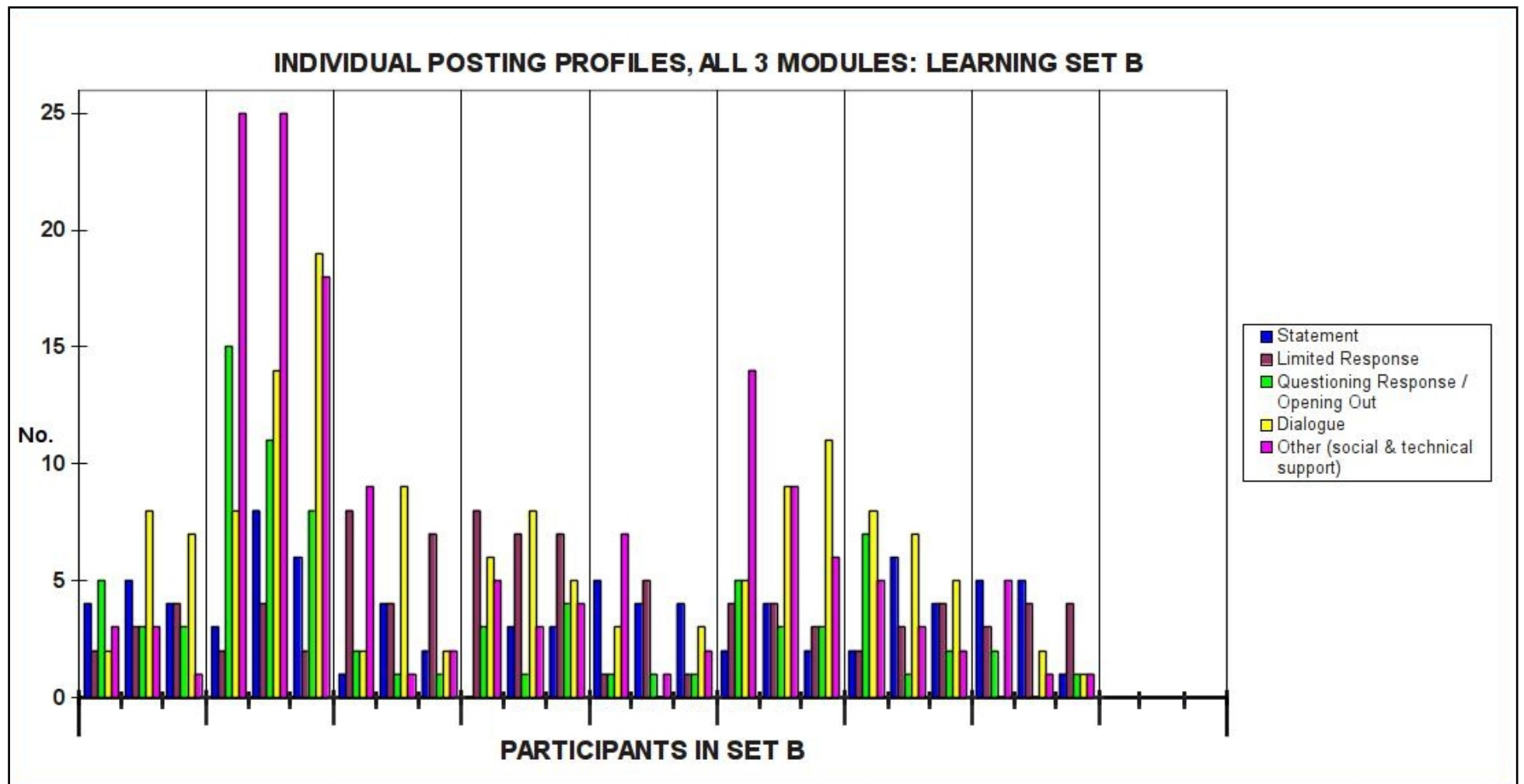


Figure 5.5b: Individual student profiles, Learning Set B, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

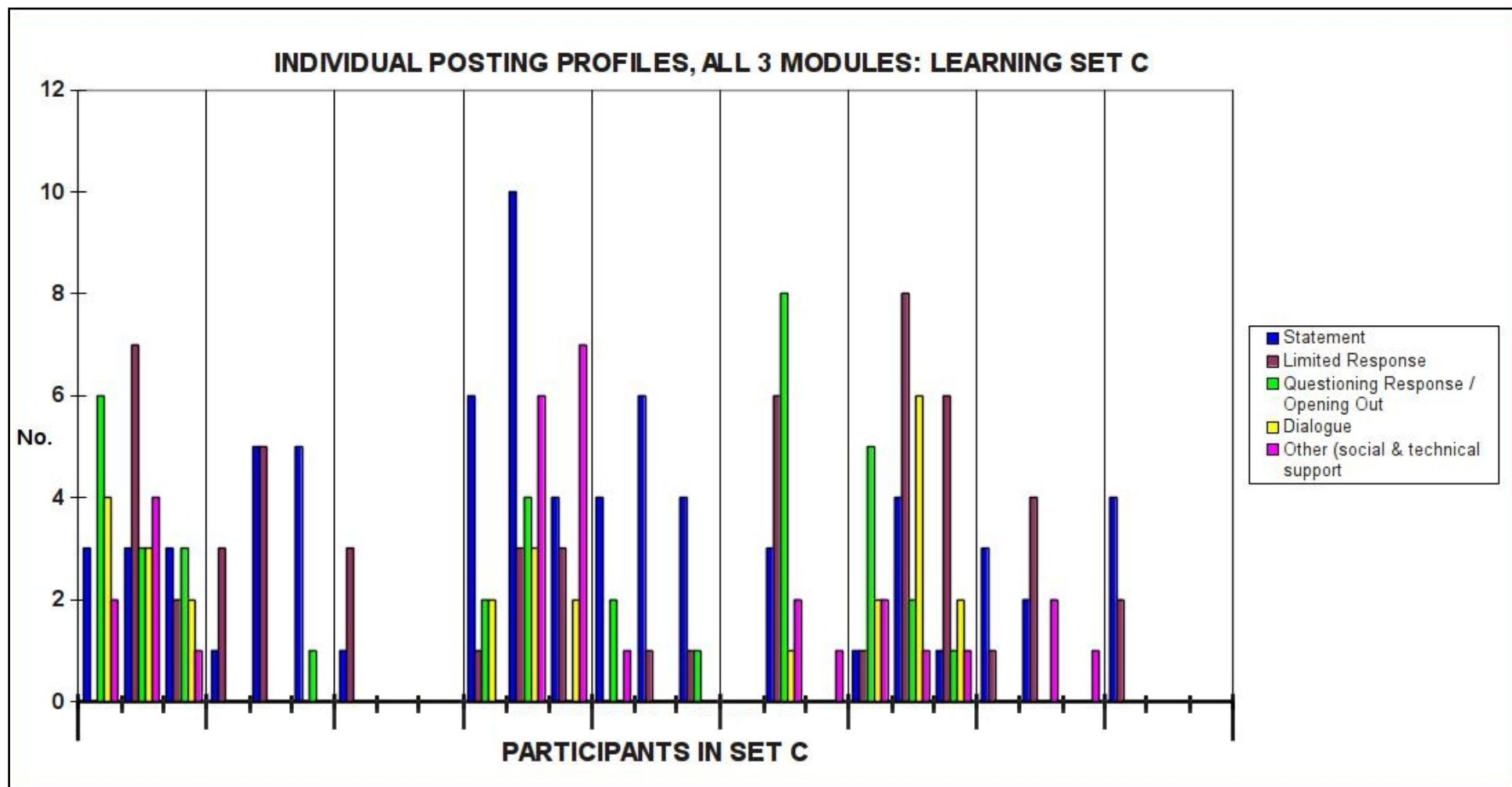


Figure 5.5c: Individual student profiles, Learning Set C, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

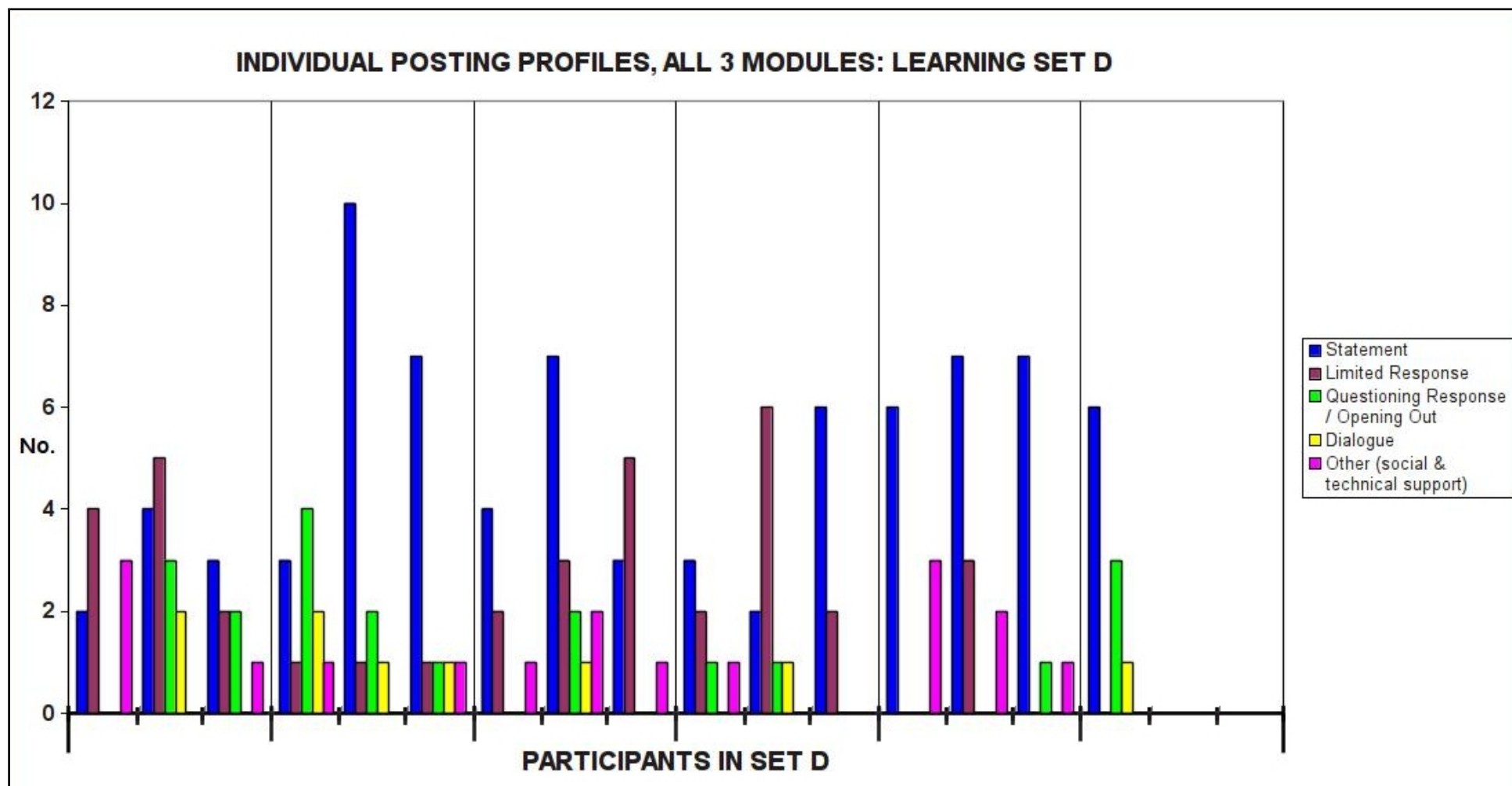


Figure 5. 5d: Individual student profiles, Learning Set D, all modules; analysed using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

Meanwhile, the profiles for the individual members of each Learning Set are shown in Figures 5.5a – 5.5d, from which it can be seen that not only did individuals vary quite substantially in the quantity of their contributions [see especially the resulting need for a very different scale on the Y axis for Figure 5.5b], but they also differed quite markedly in the style of posting adopted, with Learning Sets B and D evidencing vastly greater engagement in 'Dialogue', shared amongst a far greater proportion of group members.

It is necessary to note that although the group allocations remained static throughout the year, some students intercalated for one or more modules, creating slight variations in the make-up of some groups. These gaps in engagement can also be clearly seen in Figures 5.5a – 5.5d [above]. In Learning Set A, for example, one student dropped out after the first module; another was present only in Modules 1 and 3; whilst a third engaged only in the first two modules. Thus, when seeking to explain the lack of 'Dialogue' in Module 3, we can see that there was only a single individual who was present in Module 2 but not in Module 3.

As identified earlier, it is possible, albeit unlikely, that a single individual could make a significant difference by making a single, catalyst, contribution. However, in this particular case, I feel that it is highly unlikely that they are the underlying cause for the lack of any 'Dialogue' in the final module, since we can see that her profile contains no 'Dialogue' and only a single instance of a 'Questioning Response' in Module 2. And whilst we must not disregard the possibility for any Questioning Response to be a key trigger, contributing directly to the creation of 'Dialogue, on this occasion it was an *impotent gambit*, which did not actually yield any replies. Another source of this phenomenon must therefore be sought. Thus, tutor postings will be considered in Section 5.5, with students' perceptions of their interactions, the impact of fellow students on their actions and overall online learning experience explored in Chapter 6.

Figure 5.5b (above) shows that there were two members of Learning Set B who posted substantially more than their colleagues (one far more than the other), which could potentially lead to a situation of dominance, and the consequent inhibiting of discussion from their colleagues. However, this does not seem to have deterred the group as a whole from contributing (apart from the 'lurker', whose views are explored in Chapter 6), nor from successfully achieving 'Dialogue' in all modules. It is, perhaps, of some note that a large proportion of the postings from the most active group member fell into the 'Other' category, indicating activity of an explicitly supportive nature, which might feel less dominant or threatening than a larger number of postings in the academic categories. Furthermore, since all

active group members (*ie*: everyone except the lurker) can be seen to have contributed to the emerging dialogue, this seems to indicate the strongly beneficial impact of peer facilitators, and may also indicate a further advantage in having strong leadership from within the group. This is discussed further in Section 5.4b.

5.3c Type of tutor postings

As discussed in Chapter 2, opinion is divided regarding the extent to which it might be helpful for tutors to engage in dialogue alongside their learners, although proposed peer roles for tutors, such as the '*Meddler in the Middle*' (McWilliam, 2008) suggest that this would result in an enhanced learning experience. Given that the different tutors made substantially different quantities and types of postings [see Table 5.8, above] their effect on group behaviour is worthy of investigation.

Analysis of tutor postings, using the Sackville & Sherratt (2006) Typology, is presented in Figure 5.6 [overleaf] and also in Table 5.13 [where percentages have again been rounded to the nearest whole number]:

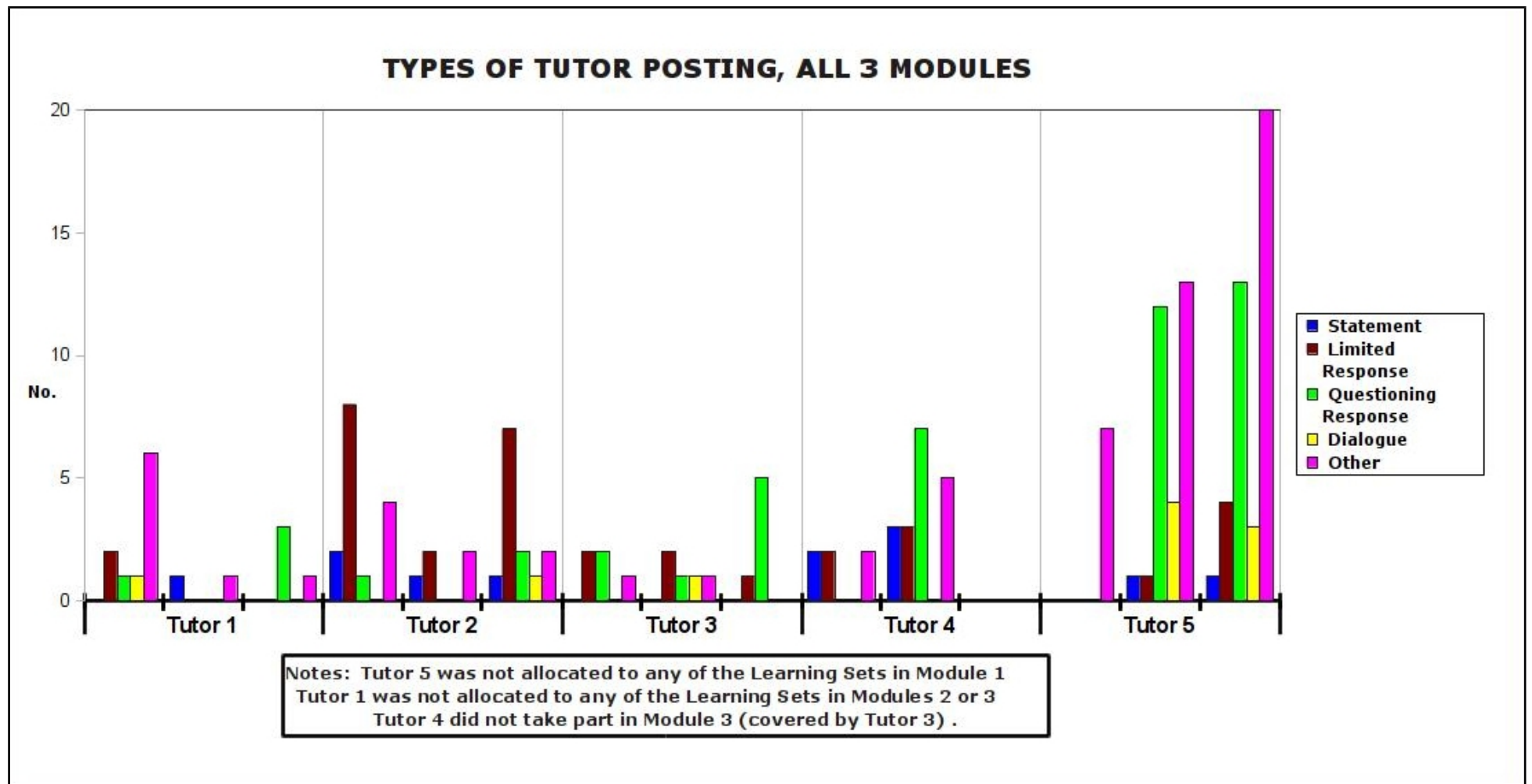


Figure 5. 6: Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

TYPE OF TUTOR POSTINGS						
		Tutor 1	Tutor 2	Tutor 3	Tutor 4	Tutor 5
MODULE 1	Statement	0	2 13%	0	2 33%	0
	Limited Response	2 20%	8 53%	2 40%	2 33%	0
	Questioning Response	1 10%	1 7%	2 40%	0	0
	Dialogue	1 10%	0	0	0	0
	Other	6 60%	4 27%	1 20%	2 33%	7 100%
MODULE 2	Statement	1 50%	1 20%	0	3 17%	1 3%
	Limited Response	0	2 40%	2 40%	3 17%	1 3%
	Questioning Response	0	0	1 20%	7 39%	12 39%
	Dialogue	0	0	1 20%	0	4 13%
	Other	1 50%	2 40%	1 20%	5 28%	13 42%
MODULE 3	Statement	0	1 8%	0	0	1 2%
	Limited Response	0	7 54%	1 33%	0	4 10%
	Questioning Response	3 75%	2 15%	5 67%	0	13 32%
	Dialogue	0	1 8%	0	0	3 7%
	Other	1 25%	2 15%	0	0	20 49%
Notes: 'CPD Tutors' ID was used to structure the Discussion Boards in Module 1 only. Tutor 5 was not allocated to any of the Learning Sets in Module 1. Tutor 1 was not allocated to any of the Learning Sets in Modules 2 or 3. Tutor 4 was absent in Module 3 (covered by Tutor 3)						

Table 5.13: Type of Tutor Postings, analysed using Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a)

Thus, it is apparent that Tutor 4 did not engage in 'Dialogue', favouring the somewhat engaging 'Questioning Response' in Module 2 (but not at all during the other modules); whereas Tutor 2 consistently posted more than Tutor 4, but consistently favoured the less engaging 'Limited Response'; whilst Tutor 5 not only posted far more messages overall, but also had a much higher level of social, technical, and discursive content, possibly indicating fuller participation and a resonance with McWilliam's (2008) proposition of the '*Meddler in the Middle*', noted above, potentially contributing to the overall achievement of 'Dialogue' within the relevant groups during Modules 2 and 3 (which were the only occasions when Tutor 5 was formally attached to a Learning Set).

5.4 Community of Inquiry Analysis

This section presents analysis of the discussion board archive using the Community of Inquiry Framework (CoI) (Garrison et al, 2000; Garrison & Anderson, 2003). As identified previously [see Section 2.2], the CoI consists of three elements of 'presence' [Social Presence, Teaching Presence, and Cognitive Presence], each divided into sub-categories with their own set of indicators.

The elements of 'presence', along with categories and indicators of each of these are summarised in Figure 5.7 [overleaf], from which it can be seen that the precise descriptions and labels for each of the elements of 'presence' within the CoI used here are the slightly refined versions presented by Garrison and Anderson (2003), rather than the original 'raw' characterisation dating from 2000.

As noted in Section 3.8c, opinion is divided regarding the unit of analysis which will yield the best insights (Rourke et al, 2001). In order to identify a greater level of detail, the CoI analysis has been carried out here at thematic level – *ie*, acknowledging that a single message might contain several different elements, all of which need identifying. Thus, the analysis in Tables 5.14 – 5.17 does not correspond directly to the overall number of messages, shown earlier [Table 5.3].

CHAPTER 5: DISCUSSION BOARD ANALYSIS

COMMUNITY OF INQUIRY		
Elements	Categories	Indicators
Teaching Presence	Design and organization	Setting a curriculum
		Designing methods
		Establishing time parameters
		Utilizing medium effectively
		Establishing netiquette
		Making macro-level comments about course content
	Facilitating discourse	Identifying areas of agreement/disagreement
		Seeking to reach consensus/understanding
		Encouraging, acknowledging, or reinforcing student contributions
		Setting climate for learning
		Drawing in participants, prompting discussion
		Assessing the efficacy of the process
	Direct Instruction	Present content/questions
		Focus the discussion on specific issues
		Summarize the discussion
		Confirm understanding through assessment and explanatory feedback
		Diagnose misconceptions
		Inject knowledge from diverse sources, eg textbook, articles, Internet, personal experience (includes pointers to resources)
		Responding to technical concerns
Social Presence	Affective	Expression of emotions
		Use of humour
		Self-disclosure
	Open communication	Continuing a thread
		Quoting from others' messages
		Referring explicitly to others' messages
		Asking questions
		Complimenting, expressing appreciation
		Expressing agreement
	Cohesive	Vocatives
		Addresses or refers to the group using inclusive pronouns
		Phatics, salutations

Continued overleaf...

COMMUNITY OF INQUIRY		
Elements	Categories	Indicators
Cognitive Presence	Triggering event	Recognize problem
		Puzzlement
	Exploration	Divergence
		Information exchange
		Suggestions
		Brainstorming
		Intuitive leaps
	Integration	Convergence
		Synthesis
		Solutions
	Resolution	Apply
		Test
		Defend

Figure 5.7: Summary of Community of Inquiry items (Garrison & Anderson, 2003: 51, 61, 68, 70 & 71)

5.4a Analysis of Learning Set interactions

Analysis of interactions between students and tutors in each of the four Learning Sets, using the Community of Inquiry framework (Garrison & Anderson, 2003) is presented in Tables 5.14 – 5.17, and summarised graphically in Figures 5.8 – 5.11, overleaf.

Thus, it can be seen that although the underlying numbers differed between groups, some of which were more verbose than others [see Table 5.4], the overall shape of the four groups' profiles appears similar [Figures 5.8 – 5.11]. In particular, it is apparent that all four Learning Sets had a strong student profile for the 'Social Presence' element throughout the whole course, with students contributing at least 74% of social presence indicators (and in one case reaching 99%). All groups also had a higher level of 'Social Presence' in module 2, perhaps indicating that they had become more familiar and comfortable with each other as the course had progressed.

CHAPTER 5: DISCUSSION BOARD ANALYSIS

CoI ANALYSIS									
LEARNING SET A									
	MODULE 1			MODULE 2			MODULE 3		
CoI Element	Total	Tutor	Student	Total	Tutor	Student	Total	Tutor	Student
Teaching Presence: Design & Organization	8	8 100%	0	10	10 100%	0	1	0	1 100%
Teaching Presence: Facilitating Discourse	9	9 100%	0	21	16 76%	5 24%	5	4 80%	1 20%
Teaching Presence: Direct Instruction	13	6 46%	7 54%	11	3 27%	8 73%	3	3 100%	0
Total Teaching Presence	30	23 77%	7 23%	42	29 69%	13 31%	8	7 88%	1 12%
Social Presence: Affective	41	6 15%	35 85%	43	4 9%	39 91%	10	0	10 100%
Social Presence: Open Communication	78	14 18%	64 82%	97	16 16%	81 84%	55	4 7%	51 93%
Social Presence: Cohesive	46	21 46%	25 54%	67	31 46%	36 54%	45	4 9%	41 91%
Total Social Presence	165	41 25%	124 75%	207	51 25%	156 75%	110	8 7%	102 93%
Cognitive Presence: Triggering Event	8	6 75%	2 25%	27	11 41%	16 59%	9	0	9 100%
Cognitive Presence: Exploration	51	0	51 100%	78	0	78 100%	63	0	63 100%
Cognitive Presence: Integration	16	0	16 100%	11	0	11 100%	6	0	6 100%
Cognitive Presence: Resolution	1	0	1 100%	0	0	0	0	0	0
Total Cognitive Presence	76	6 8%	70 92%	116	11 9%	105 91%	78	0	78 100%

Table 5.14: Analysis of Learning Set A, using CoI (Garrison & Anderson, 2003)

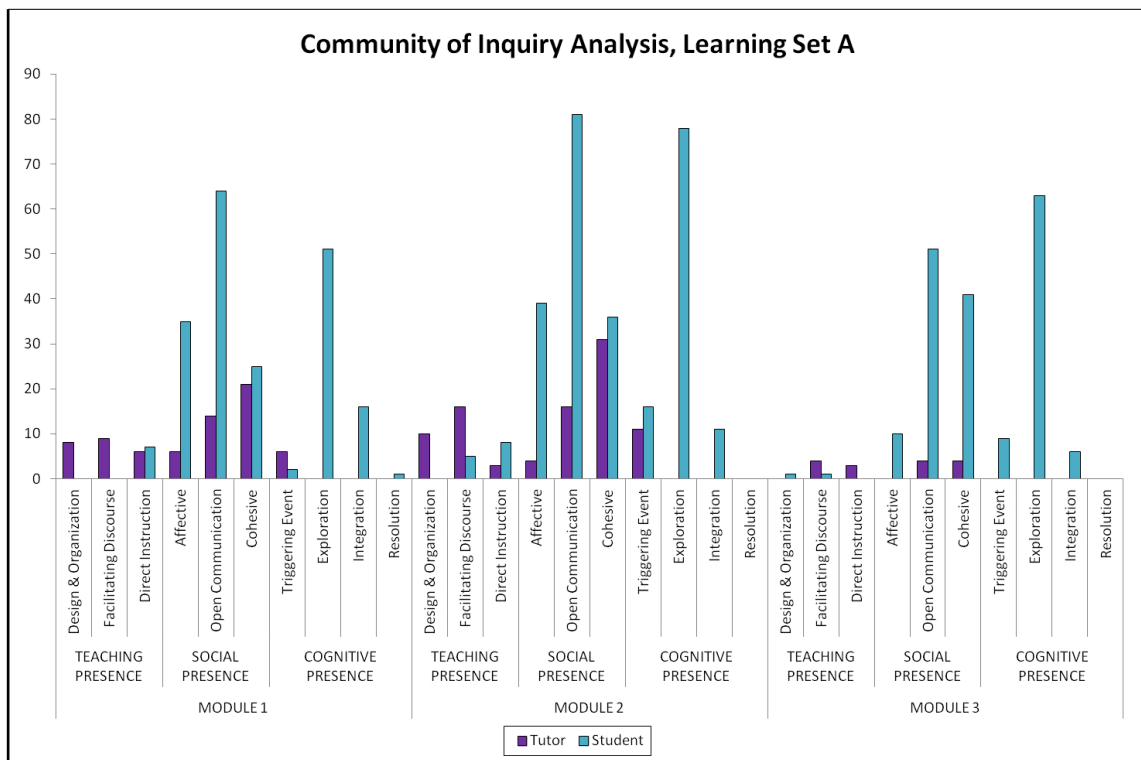


Figure 5.8: CoI Analysis of Learning Set A (Garrison & Anderson, 2003)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

CoI ANALYSIS									
LEARNING SET B									
	MODULE 1			MODULE 2			MODULE 3		
CoI Element	Total	Tutor	Student	Total	Tutor	Student	Total	Tutor	Student
Teaching Presence: Design & Organization	13	9 69%	4 31%	20	4 20%	16 80%	17	10 59%	7 41%
Teaching Presence: Facilitating Discourse	27	8 30%	19 70%	30	1 3%	29 97%	62	37 60%	25 40%
Teaching Presence: Direct Instruction	29	6 21%	23 79%	30	0	30 100%	23	11 48%	12 52%
Total Teaching Presence	69	23 33%	46 67%	80	5 6%	75 94%	102	58 57%	44 43%
Social Presence: Affective	176	7 4%	169 96%	139	1 1%	138 99%	152	11 7%	141 93%
Social Presence: Open Communication	286	8 3%	278 97%	285	4 1%	281 99%	249	27 11%	222 89%
Social Presence: Cohesive	292	16 5%	276 95%	284	8 3%	276 97%	306	51 17%	255 83%
Total Social Presence	754	31 4%	723 96%	708	13 2%	695 98%	707	89 13%	618 87%
Cognitive Presence: Triggering Event	8	6 75%	2 25%	15	0	15 100%	10	1 10%	9 90%
Cognitive Presence: Exploration	135	0	135 100%	136	1 1%	135 99%	120	0	120 100%
Cognitive Presence: Integration	25	0	25 100%	16	0	16 100%	13	0	13 100%
Cognitive Presence: Resolution	4	0	4 100%	0	0	0	1	0	1 100%
Total Cognitive Presence	172	6 3%	166 97%	167	1 1%	166 99%	144	1 1%	143 99%

Table 5.15: Analysis of Learning Set B, using CoI (Garrison & Anderson, 2003)

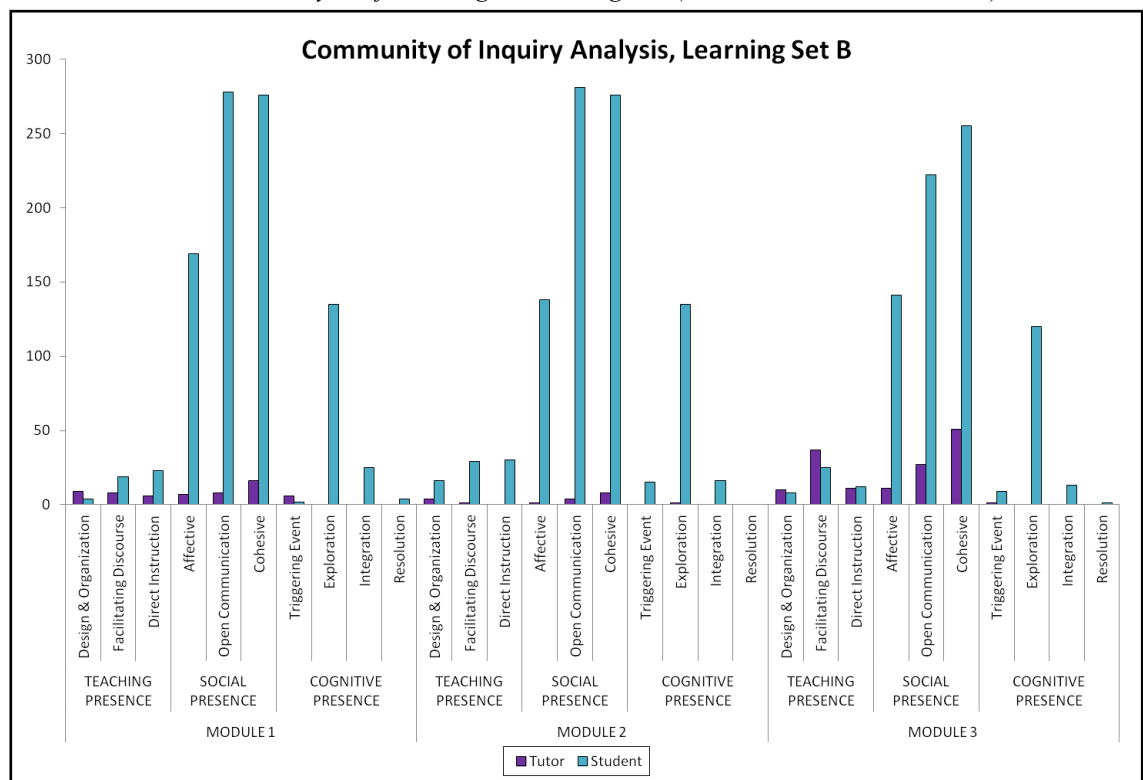


Figure 5.9: CoI Analysis of Learning Set B (Garrison & Anderson, 2003)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

CoI ANALYSIS									
LEARNING SET C									
	MODULE 1			MODULE 2			MODULE 3		
CoI Element	Total	Tutor	Student	Total	Tutor	Student	Total	Tutor	Student
Teaching Presence: Design & Organization	11	8 73%	3 27%	12	12 100%	0	12	4 33%	8 67%
Teaching Presence: Facilitating Discourse	15	9 60%	6 40%	10	2 20%	8 80%	5	3 60%	2 40%
Teaching Presence: Direct Instruction	6	0	6 100%	18	2 11%	16 89%	13	12 92%	1 8%
Total Teaching Presence	32	17 53%	15 47%	40	16 40%	24 60%	30	19 63%	11 37%
Social Presence: Affective	23	0	23 100%	66	0	66 100%	16	3 19%	13 81%
Social Presence: Open Communication	79	6 8%	73 92%	196	3 2%	193 98%	79	16 20%	63 80%
Social Presence: Cohesive	56	7 13%	49 87%	111	2 2%	109 98%	58	21 36%	37 64%
Total Social Presence	158	13 8%	145 92%	373	5 1%	368 99%	153	40 26%	113 74%
Cognitive Presence: Triggering Event	10	6 60%	4 40%	23	10 43%	13 57%	16	1 6%	15 94%
Cognitive Presence: Exploration	47	0	47 100%	92	0	92 100%	48	2 4%	46 96%
Cognitive Presence: Integration	6	0	6 100%	6	0	6 100%	3	0	3 100%
Cognitive Presence: Resolution	0	0	0	0	0	0	0	0	0
Total Cognitive Presence	63	6 10%	57 90%	121	10 8%	111 92%	67	3 4%	64 96%

Table 5.16: Analysis of Learning Set C, using CoI (Garrison & Anderson, 2003)

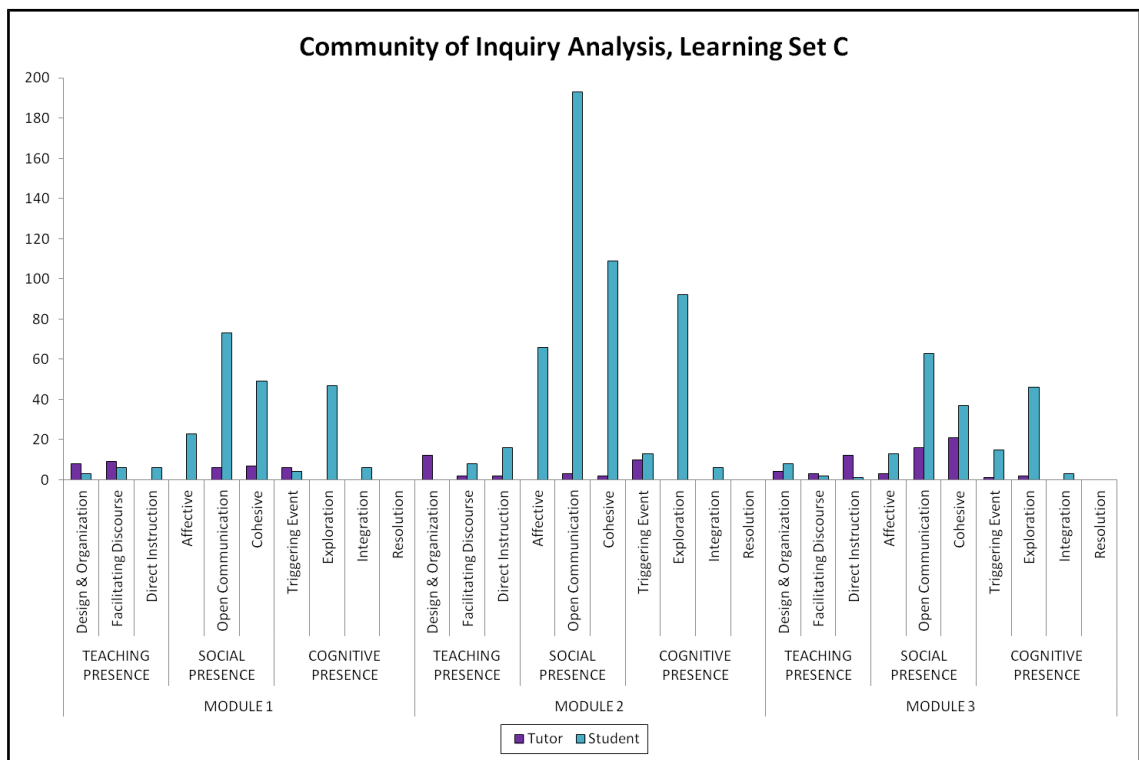


Figure 5.10: CoI Analysis of Learning Set C (Garrison & Anderson, 2003)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

CoI ANALYSIS									
LEARNING SET D									
	MODULE 1			MODULE 2			MODULE 3		
CoI Element	Total	Tutor	Student	Total	Tutor	Student	Total	Tutor	Student
Teaching Presence: Design & Organization	8	7 88%	1 12%	12	1 8%	11 92%	13	0	13 100%
Teaching Presence: Facilitating Discourse	2	2 100%	0	11	1 9%	10 91%	4	4 100%	0
Teaching Presence: Direct Instruction	8	4 50%	4 50%	13	3 23%	10 77%	3	2 67%	1 33%
Total Teaching Presence	18	13 72%	5 28%	36	5 14%	31 86%	20	6 30%	14 70%
Social Presence: Affective	29	1 3%	28 97%	27	0	27 100%	7	0	7 100%
Social Presence: Open Communication	63	4 6%	59 94%	83	7 8%	76 92%	37	3 8%	34 92%
Social Presence: Cohesive	40	1 3%	39 97%	60	7 12%	53 88%	43	7 16%	36 84%
Total Social Presence	132	6 5%	126 95%	170	14 8%	156 92%	87	10 11%	77 89%
Cognitive Presence: Triggering Event	12	6 50%	6 50%	16	0	16 100%	6	0	6 100%
Cognitive Presence: Exploration	41	0	41 100%	72	0	72 100%	43	0	43 100%
Cognitive Presence: Integration	3	0	3 100%	2	0	2 100%	4	0	4 100%
Cognitive Presence: Resolution	0	0	0	0	0	0	0	0	0
Total Cognitive Presence	56	6 11%	50 89%	90	0	90 100%	53	0	53 100%

Table 5.17: Analysis of Learning Set D, using CoI (Garrison & Anderson, 2003)

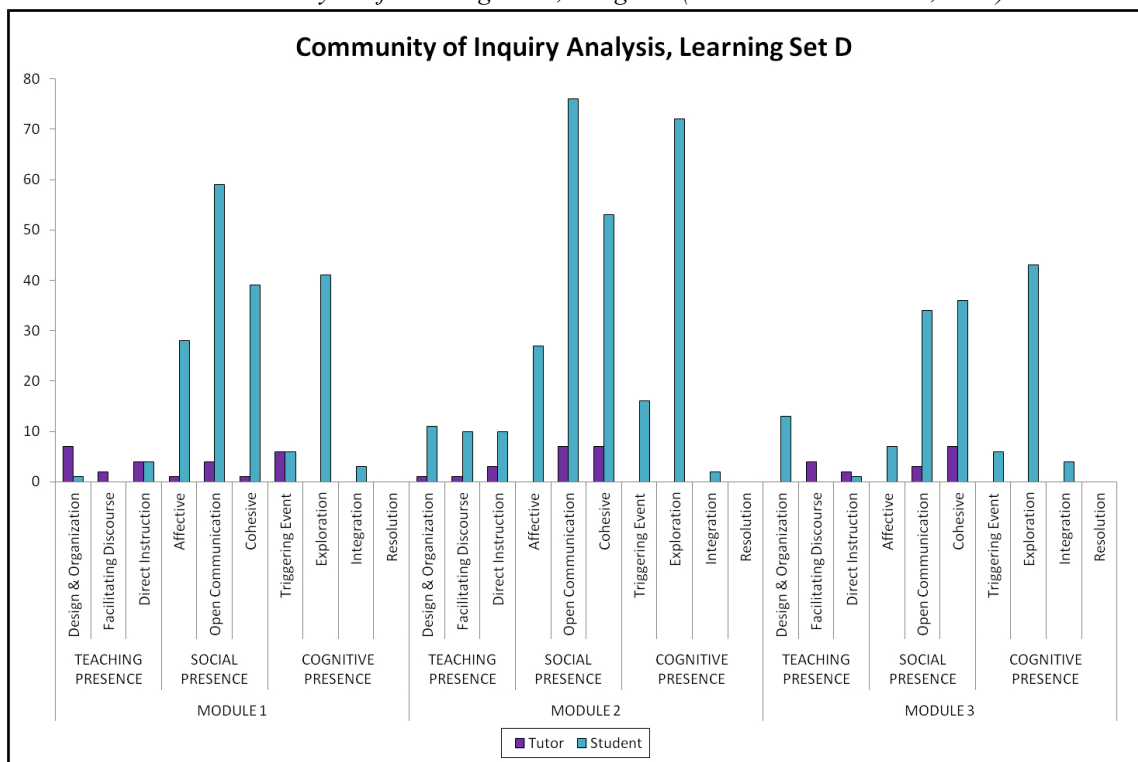


Figure 5.11: CoI Analysis of Learning Set D (Garrison & Anderson, 2003)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

As regards the individual elements of 'Social Presence', it is interesting to note that Learning Sets B and D maintained similar amounts of both 'Open Communication' (OC) and 'Cohesive' indicators across all modules. The higher proportions of Cohesive indicators evidenced for Sets B and D can, perhaps, be seen as indicative of the strength of their sense of community and integration as a group (most evident in Set B). This is shown in Table 5.18, below:-

	MODULE 1	MODULE 2	MODULE 3
CoI Element	Students	Students	Students
LEARNING SET A			
Social Presence: Open Communication	64	81	51
Social Presence: Cohesive	25	36	41
LEARNING SET B			
Social Presence: Open Communication	278	281	222
Social Presence: Cohesive	276	276	255
LEARNING SET C			
Social Presence: Open Communication	73	193	63
Social Presence: Cohesive	49	109	37
LEARNING SET D			
Social Presence: Open Communication	59	76	34
Social Presence: Cohesive	39	53	36

Table 5. 18: Student contributions to 'Open Communication' & 'Cohesive' indicators

In contrast, Sets A and C had much higher proportions of OC, with Cohesive indicators consistently around half that of OC. For Set C, this happened in all three modules. However, in module 3, Learning Set A showed a higher proportion of Cohesive indicators, more consistent with the more cohesive profile of Sets B and D, which can perhaps indicate that a somewhat belated sense of community may finally have been starting to develop within this group.

Further analysis indicates that the differences between Learning Sets were significant to a level of 0.01 in all modules, both for Cohesive indicators, which yielded χ^2 values of **41.06**, **303.74**, and **382.99** in each module respectively; and for Open Communication (OC) which yielded χ^2 values of **287.11**, **183.88**, and **246.33** in each module respectively. These calculations are shown in Tables 5.19a and 5.19b, overleaf:-

CHAPTER 5: DISCUSSION BOARD ANALYSIS

		Observed	Expected	Residual	Residual Sq.	Res. Sq. /Exp.
Module 1	Set A	25	97.25	-72.25	5220.06	53.68
	Set B	276	97.25	178.75	31951.56	328.55
	Set C	49	97.25	-48.25	2328.06	23.94
	Set D	39	97.25	-58.25	3393.06	34.89
	Total	389				441.06
Module 2	Set A	36	118.5	-82.50	6806.25	57.44
	Set B	276	118.5	157.50	24806.25	209.34
	Set C	109	118.5	-9.50	90.25	0.76
	Set D	53	118.5	-65.50	4290.25	36.20
	Total	474				303.74
Module 3	Set A	41	92.25	-51.25	2626.56	28.47
	Set B	255	92.25	162.75	26487.56	287.13
	Set C	37	92.25	-55.25	3052.56	33.09
	Set D	36	92.25	-56.25	3164.06	34.30
	Total	369				382.99

Table 5.19a: Chi-Square for Goodness of Fit, Cohesive indicators, all modules

		Observed	Expected	Residual	Residual Sq.	Res. Sq. /Exp.
Module 1	Set A	64	118.5	-54.50	2970.25	25.07
	Set B	278	118.5	159.50	25440.25	214.69
	Set C	73	118.5	-45.50	2070.25	17.47
	Set D	59	118.5	-59.50	3540.25	29.88
	Total	474				287.11
Module 2	Set A	81	157.75	-76.75	5890.56	37.34
	Set B	281	157.75	123.25	15190.56	96.30
	Set C	193	157.75	35.25	1242.56	7.88
	Set D	76	157.75	-81.75	6683.06	42.36
	Total	631				183.88
Module 3	Set A	51	92.5	-41.50	1722.25	18.62
	Set B	222	92.5	129.50	16770.25	181.30
	Set C	63	92.5	-29.50	870.25	9.41
	Set D	34	92.5	-58.50	3422.25	37.00
	Total	370				246.33

Table 5.19b: Chi-Square for Goodness of Fit, Open Communication (OC), all modules

CHAPTER 5: DISCUSSION BOARD ANALYSIS

Meanwhile, it can be seen from Tables 5.14 – 5.17, and Figures 5.8 – 5.11 [above] that all four groups showed much lower levels of 'Teaching Presence' and 'Cognitive Presence' throughout, although all also showed a good level of 'Exploration' (an early phase of 'Cognitive Presence'), with student contributions representing a fairly consistent 96-100% of this indicator.

However, the ratio of contributions from tutors and students in the CoI element 'Teaching Presence' deserves further consideration, since this can be seen to have varied wildly, both between groups and between modules, with students contributing as little as 12% of totals for this element in Learning Set A, Module 3 [see Table 5.14] and as much as 94% in Learning Set B, Module 2 [see Table 5.15], with χ^2 values of **59.34**, **62.06**, and **58.80** in each module respectively. The figure for Learning Set B in Module 2 can be explained by the active disengagement of the tutor from the discussion board in that module, and this is explored in more detail in Section 5.4b, below. However, other groups evidenced 86%, 60% and 31% of Teaching Presence contributions during that same module. This latter figure relates to Learning Set A [see Table 5.14], who can be seen as having a greater dependence on the tutor, especially for 'Design and Organisation' (DO), for which the tutor provided 100% of inputs, during the first two modules.

Interestingly, however, this same group can be seen to have coped without any organising contributions from their tutor in the final module, and it is especially noticeable that the students did not find it necessary to provide compensatory postings under this indicator, with only a single occurrence of DO evidenced in module 3. This, then, is a good illustration of Archer's (2010) proposition that discussion boards do not capture the full story of the online learning experience. In this case, the topics for the nine formal Activities in Module 3 were specified within the course syllabus, and so did not actually need either an organisational Teaching Presence contribution nor a Triggering Event (Cognitive Presence), since the students in Learning Set A already knew what was expected, and so could simply make their postings on the due date, according to their pre-defined syllabus - possibly indicating that they had 'matured' as online learners by the time they came to their third module, as proposed by Arbaugh (2004). However, this also contrasts sharply with the behaviour observed in Learning Sets B, C and D, where students actively made organisational postings, based on the syllabus for the programme, in order to provide themselves and their groups with a structure similar to the scaffolding provided for them in the first module.

Further differences are apparent between groups when considering other parts of the Teaching Presence element. For example, 76-100% of 'Facilitating Discourse' (FD) prompts came from the tutor in Set A [see Table 5.14], while with Learning Set D in the first and last modules 100% of FD came from the tutor [see Table 5.17]. However, with the same set (Set D) in Module 2 only 9% of FD inputs came from the tutor, which is more closely aligned to the Module 2 experience of the other Learning Sets (with a 3% tutor contribution for Facilitating Discourse in Set B and 20% in Set C).

Meanwhile, Learning Set D maintained a fairly steady (albeit low) profile for Cognitive Presence throughout the course. It is interesting to note that the levels of tutor engagement for this group appears to have been relatively stable (albeit low) across the whole programme.

It can be seen that Learning Set A achieved lower levels of Cognitive Presence (especially 'Integration') in the final module, when tutor presence overall was minimal [see Figure 5.8], but this was also true for Learning Sets B and C [see Figures 5.9 and 5.10]. However, it is apparent that for these groups, tutor presence overall was much higher in this module (26% of Social Presence and 63% of Teaching Presence came from the tutor in the case of Set C, and 13% of Social Presence and 57% of Teaching Presence for Set B), possibly supporting the notion that too much tutor posting can have a detrimental effect on the development of discussion (An et al, 2009; Savvidou, 2013). Note that Students' perceptions of tutor engagement are explored in Chapter 6.

5.4b Explicit tutor disengagement & peer facilitators

Learning Set B is especially interesting in the way they interacted in Module 2. The tutor warned the group at the start of the module that she would not be actively posting, although she did make a small number of contributions, as shown in Table 5.15. Despite the shared culture borne from co-working, each member of the tutor team had their own individual values, resulting in an individual teaching style, which was articulated to students, where appropriate, at the start of each module. In this particular case, Tutor 2 was allocated to Learning Set B for Module 2, and chose to articulate her stance explicitly, as follows:

*“... while I don't want you to think that I am not interested in what you are saying to each other - far from it - as you seem to have established relationships and ways of working which I will assume work for you all unless you tell me otherwise, **I won't***

CHAPTER 5: DISCUSSION BOARD ANALYSIS

construe my role as requiring me to participate in the discussions just for appearance's sake."

(Tutor 2: Module 2 Discussion Board)
[highlighting not in original]

This is a very clear statement of disengagement from the role of online facilitator, on the part of the Tutor, and since it shows a marked change in behaviour [see Section 5.2c, above] it can, perhaps, be seen to resonate with the proposition of Kamin and colleagues (2006), that tutors' facilitation styles and frequency of intervention will change during a programme, as they get to know their students. Indeed, it should be borne in mind that all members of the tutor team were involved with the programme throughout the year, and although they took individual responsibility for a different Learning Set in each module, they also had some ongoing contact with the cohort as a whole. Thus, some familiarity had clearly been established between Tutor 2 and Learning Set B beforehand, even though she had not previously been their main facilitator until Module 2.

Examination of the CoI results for this group in Table 5.15 (above) indicates that the students in Learning Set B seem to have risen to this challenge, and have consequently become more active in all CoI elements. Indeed, these results seem to bear out the proposition made recently by Shea and colleagues (2010a:14) that "*students' teaching presence may have a 'floor' threshold level and when the instructor's teaching presence drops to zero students attempt to recreate 'instructional equilibrium'*", since 94% of their 80 Teaching Presence indicators (a higher ratio and also a higher total figure than for any other group) can be traced to student postings during Module 2.

This also resonates with Heron's (1999) proposition of a three-stage facilitative journey for any group of learners, from 'Hierarchical Intervention' through 'Cooperative' to 'Autonomous', with groups of professional "*skilled people*" potentially starting at stage two or even beyond (Heron, 1999:13), indicating a belief that as learners mature, they become capable of flourishing without the direction of a 'facilitator'.

This contrasts very strongly with the proposition from Garrison and Cleveland-Innes (2005) regarding the need for instructor leadership, discussed in Sections 2.2b and 2.2c, and noted above [Section 5.3a]. Indeed, from the analysis shown in Table 5.15 (above) it can be seen that when the students in this group took responsibility for facilitating discourse, the overall levels for each CoI element remained remarkably similar, even for the much-disputed area of Cognitive Presence, the one exception being that the students from Learning Set B did not reach

the final cognitive element, 'Resolution', at all during Module 2. Quite apart from the controversy noted in Section 2.2c, and Archer's (2010) proposition that the online discussion board does not necessarily fully capture all aspects of the learning experience, I would suggest that no firm conclusions can be drawn from a comparison of such small numbers. Nevertheless, this still appears to indicate that student 'peer facilitators' might indeed be able to fulfil the need for CoI 'Teaching Presence' in an online discussion forum, as proposed by Rourke and Anderson (2002), achieving both a sound learning experience and an acceptable cognitive outcome.

There is, however, a slight caveat that must be outlined at this point, which may impact on the extent to which this approach could be successfully implemented elsewhere and this is that these students are unlikely to be representative of all students, since they were mature professionals, who had already attained significant levels of seniority within their clinical profession, and as such, they also had significant experience to draw on to share with their peers. This particular course is also designed for clinical educators, and therefore our students can be expected to have some experience of undertaking a 'teaching' role outside of this course – another factor which may have been influential in the apparent success of the module that ran without significant faculty intervention. The potential for generalisation of my findings is explored further in Chapter 9; and the views of the students regarding their experience as peer facilitators is explored in Chapter 6.

Also of note is Shea and colleagues (2010a: 14) concept of "*instructional equilibrium*" - implying not simply a disposition for students to compensate for a lack of "*instructor's teaching presence*", but a two-way balance. This effect can be seen in Module 3, where Learning Set B had a much more active tutor who posted more frequently with substantial contributions towards both Teaching Presence and Social Presence, which was matched by an associated drop in student contributions to both of these elements [see Table 5.15]. This finding is further considered in Chapter 8.

5.5 Blignaut & Trollip Taxonomy

This section is devoted to analysing the inputs from tutors using the taxonomy specifically designed by Blignaut and Trollip (2003a, 2003b), see Section 2.2f, to interrogate their actions. This taxonomy offers three elements of activity '*without academic content*': Administrative, Affective, and Other (including presentation of discussion topics); and three elements of activity

CHAPTER 5: DISCUSSION BOARD ANALYSIS

'with academic content': Informative, Socratic, and Corrective. Descriptions of each of the categories of this taxonomy are shown in Figure 5.12.

As noted in Section 3.8c, my analysis of tutor postings utilising the Blignaut and Trollip Taxonomy (2003a, 2003b) has been carried out at *'thematic'* level rather than classifying messages as a whole. In taking this approach, the recommendation of Blignaut and Trollip themselves (2003b) has been adopted. A thematic approach allows each message to qualify under multiple categories, which offers greater subtlety of analysis, since postings can contain different distinct elements, all of which can be acknowledged. This is especially useful when considering tutor postings, as it can be seen from Table 5.8 (above) that there were relatively few overall.

BLIGNAUT & TROLLIP TAXONOMY	
Category	Description
Administrative (without academic content)	Postings that relate to general administrative topics, such as dates, profiles, formats, functionality of software and many other organizational aspects
Affective (without academic content)	Postings that acknowledge learner participation and provide affective support
Other (without academic content)	Postings that contain non-content related messages, as well as the posting of discussion topics
Corrective (with academic content)	Postings that correct the content of a learner's postings
Informative (with academic content)	Postings that comment on a learner's posting from a content perspective and provides individual feedback
Socratic (with academic content)	Postings that ask reflective questions (Socratic questions) about the learner's postings

Figure 5.12: Summary of items in Blignaut & Trollip Taxonomy (2003a, 2003b)

Analysis of tutor postings in all three modules of this course, utilising this taxonomy, is presented in Table 5.20 and Figure 5.13. Note that percentages in the Table have again been rounded to the nearest whole number.

CHAPTER 5: DISCUSSION BOARD ANALYSIS

ANALYSIS OF TUTOR POSTINGS							
		Tutor 1	Tutor 2	Tutor 3	Tutor 4	Tutor 5	CPD Tutors
MODULE 1	Administrative	5 20%	4 15%	1 8%	2 15%	8 57%	0
	Affective	8 32%	9 33%	5 38%	3 23%	5 36%	0
	Other	2 8%	0	0	1 8%	1 7%	24 100%
	Informative	7 28%	13 48%	3 23%	7 54%	0	0
	Socratic	3 12%	1 4%	4 31%	0	0	0
	Corrective	0	0	0	0	0	0
	TOTAL	25	27	13	13	14	24
MODULE 2	Administrative	2 67%	2 14%	1 7%	5 22%	18 23%	0
	Affective	0	3 21%	5 33%	2 9%	22 28%	0
	Other	1 33%	3 21%	0	13 57%	17 22%	0
	Informative	0	5 36%	6 40%	3 13%	8 10%	0
	Socratic	0	1 7%	3 20%	0	14 18%	0
	Corrective	0	0	0	0	0	0
	TOTAL	3	14	15	23	79	0
MODULE 3	Administrative	1 20%	2 6%	1 10%	0	19 20%	0
	Affective	1 20%	12 33%	6 30%	0	31 32%	0
	Other	3 60%	0	0	0	14 15%	0
	Informative	0	18 50%	4 40%	0	10 10%	0
	Socratic	0	4 11%	5 20%	0	21 22%	0
	Corrective	0	0	0	0	1 1%	0
	TOTAL	5	36	16	0	96	0
Notes: 'CPD Tutors' ID was used to structure the Discussion Boards in Module 1 only. Tutor 5 was not allocated to any of the Learning Sets in Module 1. Tutor 1 was not allocated to any of the Learning Sets in Modules 2 or 3. Tutor 4 was absent in Module 3 (covered by Tutor 3)							

Table 5.20: Analysis of tutor postings using Blignaut & Trollip Taxonomy (2003a, 2003b)

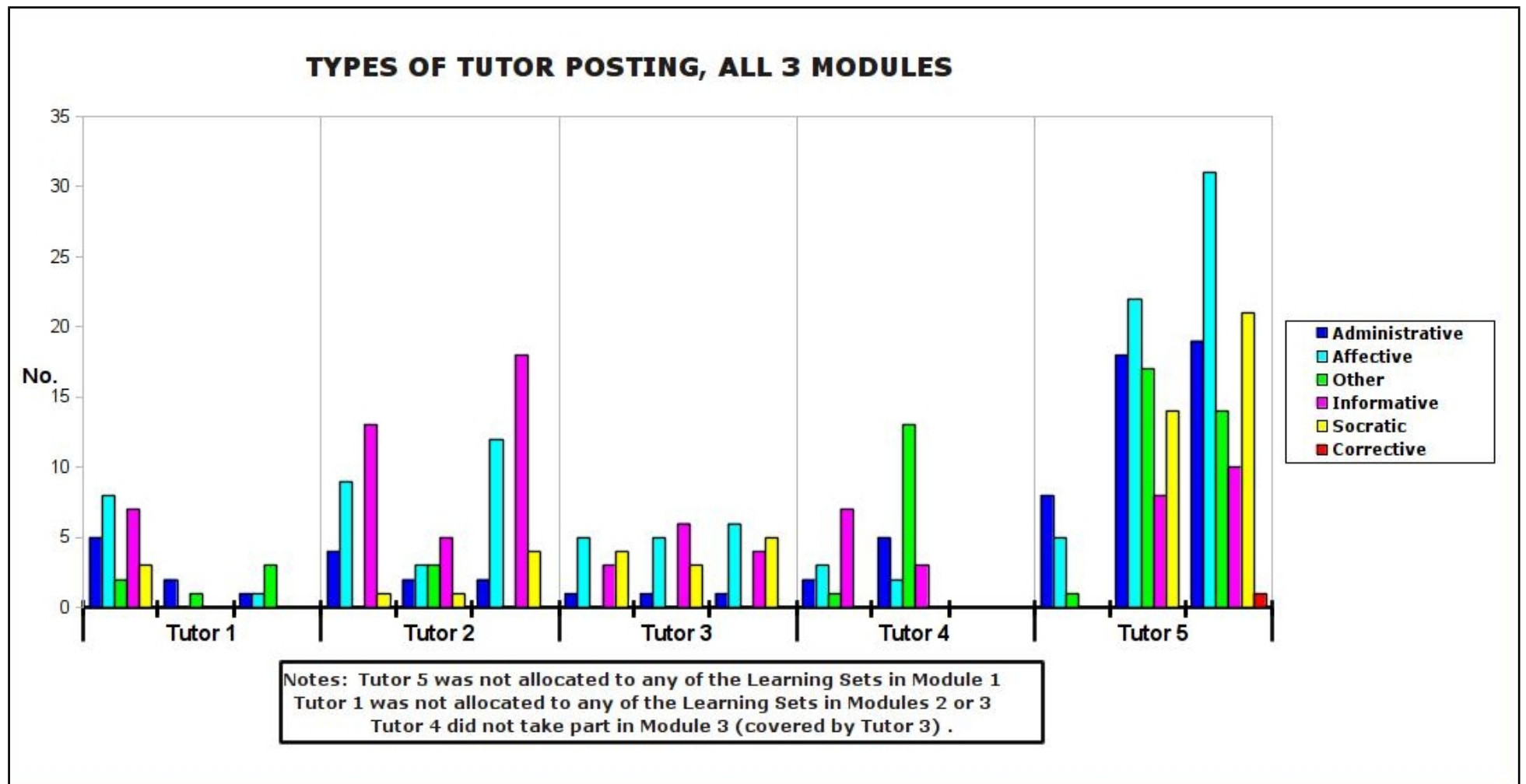


Figure 5.13: Tutor postings, analysed using Blignaut & Trollip Taxonomy (2003a, 2003b)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

The 'CPD Tutors' identity was a purely administrative device, used to provide additional scaffolding in the Module 1 discussion boards, and shown, for the sake of completeness, in Table 5.20. However, only the five tutors have been profiled in Figure 5.13, since it is the differing levels and styles of intervention of the tutors that are of interest in this study, and thus warrant further comparison. As noted above, Tutor 3 facilitated online discussion for her own group and also for a colleague's group in Module 3, although this did not result in an increased level of activity.

From this analysis, clear differences in intervention can be observed, offering a lens onto individual teaching styles. Interestingly, Heron (1999:13) has described 'Facilitation Style' as:

"the unique way a person leads a certain group, and more generally, the distinctive way that person leads any group"
(Heron, 1999:13)

This point of view, which is also borne out by Kamin and colleagues' (2006) later finding of the tutor role changing and developing during a course, hints at the importance of the relationship between the tutor and students in any given group, and its potential to influence and differentiate the tutor's approach to facilitation or intervention. This is explored further during Chapter 7.

Differences in teacher style were most notable in the 'Socratic' element, which varies widely between tutors, with Tutor 4 choosing not to adopt this approach at all, favouring instead 'Informative' interventions whenever a response 'with academic content' was felt to be required. It can be seen that Tutor 2 also favoured the 'Informative' approach, although she did also make 'Socratic' interventions. Interestingly, Tutor 5, who favoured the 'Socratic' approach quite markedly, was also the only tutor to intervene in a 'Corrective' way, albeit minimally [a single occurrence], indicating that although she emphasised a student-centred approach to dialogue, there was, nevertheless, an element of the teacher's authority still retained. It is also interesting to note that non-academic 'Affective' interventions were utilised substantially by all five tutors to encourage their students.

In exploring the influences on Learning Set A, which did not achieve 'Dialogue' (Sackville & Sherratt, 2006) in the final module, as discussed above, I have suggested that the impact of the actions of the tutor may potentially be significant. If we consider the overall posting profile of Tutor 5 in Module 2 [see Figure 5.13], and compare the behaviour of Tutor 3 in Module 3, we can see a marked difference both in quantity and style of postings, (especially bearing in mind that Tutor 3 split her responses between two groups) with Tutor 5 offering substantially more

affective support and also far more 'Socratic' engagement. It seems, therefore, that the 'Socratic' element of tutor behaviour might be an important factor. However, it is clear that Learning Set A managed to achieve 'Dialogue' in Module 1, yet if we consider the posting profile of Tutor 2, we see a similarly limited level of 'Socratic' engagement.

The affective input to support Learning Set A in Module 3 is, however, also noticeably lower, especially when we consider that Tutor 3 split her responses over two groups. Thus, it may be the influence of the encouragement offered by Affective support, combined with Socratic engagement to stimulate debate, which is the deciding factor. This is explored further in Chapter 8.

Overall, it appears that all tutors in this team shared some common practice. For example, they all made at least a minimal amount of affective (encouraging) postings whenever they were responsible for facilitating a group, and this is, perhaps, indicative of their shared values as a team. However, it is also clear that their practice was highly divergent at times, with different tutors adopting a more or less active role (compare Tutors 2 and 5, for example), and also engaging in more or less instruction and questioning behaviours (compare, for example, Tutors 4 and 5). It might be argued that these differences were born out of experience, and were a contingent response to the identified needs of the group. Alternatively, however, it could be seen as encouraging or inhibiting the development of dialogue, as noted in Section 5.3. Therefore, this will be considered in more detail in Chapter 8.

5.6 Social Network Analysis

This next section presents Social Network Analysis of the PGCTLCP discussion boards. As noted in Section 3.8d, visualisation of the interactions in online discussion boards can yield additional insights into group dynamics and behaviours (Dawson, 2010; Dawson et al, 2011). 'Sociograms' for each Learning Set have therefore been created for each module, [Figures 5.14 - 5.16], utilising the SNAPP tool (Dawson, 2008; 2010). This tool has been designed as an automated 'applet' for social network analysis, that integrates within the Virtual Learning Environment, such that communication channels within the VLE discussion board are automatically captured into a data file, along with related data such as the total number of postings from each individual. The personal network of any individual participant can also be interrogated, to further assist in identifying their influence.

CHAPTER 5: DISCUSSION BOARD ANALYSIS

As identified in Chapter 3, I have used NetDraw (Borgatti, 2002) to present the SNAPP sociograms (Dawson, 2008; 2010) in an anonymised form. Each individual participant is represented by a coloured node in the diagram, with lines representing communication with other group members on the online discussion board, with arrow-heads showing indicate the direction of communication [see Figures 5.14 – 5.16].

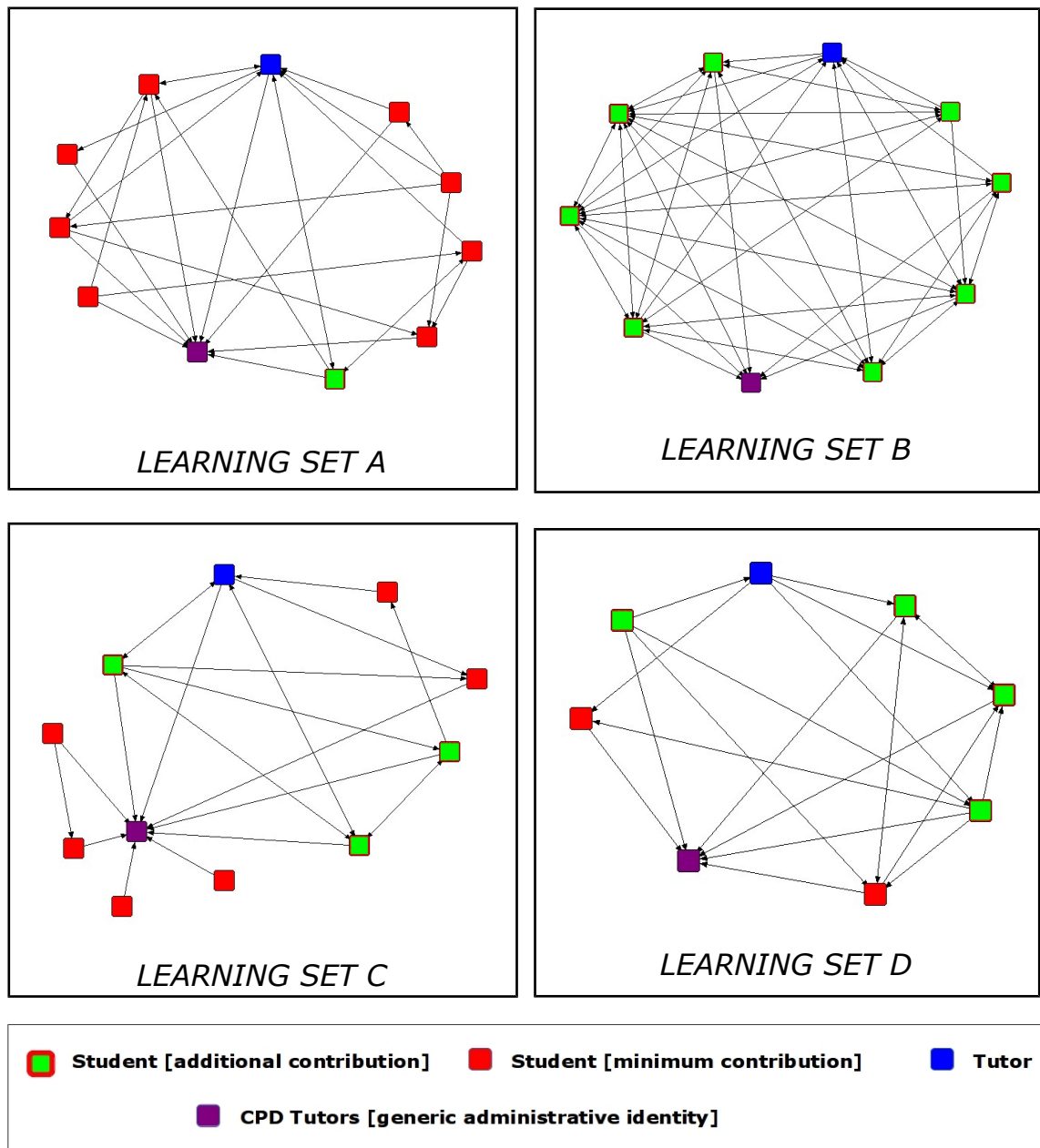


Figure 5.14: Sociograms of each Learning Set, Module 1

Note that in the sociograms for this course, [Figures 5.14 – 5.16], tutors are shown as blue nodes, and the the generic 'CPD Tutors' identity is shown in purple. Students are shown in green where they contributed more than the expected minimum number of postings (thus potentially

becoming 'peer facilitators'), or red where they were either strategic or shy and posted only the expected minimum or fewer.

From these sociograms, it can be seen that each group interacted differently. For example, in Module 1 [Figure 5.14], it can be seen that Group A had only one member who posted more than required, but all students communicated with at least two of their peers, indicating that the formally allocated Learning Set was starting to 'gel' together into a functioning group, despite the lack of social postings noted earlier [Section 5.3a].

Meanwhile, Learning Set D presented a similarly cohesive profile in Module 1, with the slight exception that a greater proportion of this group made additional postings beyond the minimum requirement. This is in keeping with the similarity in both quantity and types of posting noted earlier [see Figures 5.2 and 5.4], indicating an overall level of parity between these two groups.

However, Learning Set B can be seen to have a quite different profile in Module 1 [Figure 5.14], with all active participants (*ie* everyone except the 'lurker') posting more than the minimum requirement, and all active students communicating with at least four of their peers, indicating that this group had already formed into a highly engaged and collaborative unit.

It is also interesting to note that the 'lurker' in Learning Set B is not represented in the sociogram [Figure 5.14] since she did not make any postings onto the discussion board. This, then, supports the proposition of Blignaut and Trollip (2003b:347) that “*being silent in an online classroom is equivalent to being invisible*”.

Meanwhile, Learning Set C presented quite a different picture again [Figure 5.14]. Whilst they had 3 individuals who contributed additional postings, they can also be seen to have several disengaged individuals (although not, perhaps, quite as disengaged from the online discussion as the 'lurker' in Set B), two of whom responded only to the 'CPD Tutors' identity which set out the discussion topics, and two of whom spoke also to each other but not to the rest of the group. This is a very interesting profile, and shows that whilst some members of this Learning Set were fully engaged at this early stage in the programme, others most definitely were not. This, then, can have serious implications, both for the formation of a sense of 'community' and also for the achievement of dialogue within the online discussion board.

Interestingly, one of the disengaged students in Learning Set C (*ie*: communicating only with the 'CPD Tutor' official threads) intercalated after Module 1, possibly indicating that she had some difficulties engaging with the course as well as with the group. This also seems to resonate with Dawson's (2010) finding that low-performing (struggling) students had less well-developed ego-networks, with their SNAPP sociograms showing fewer network contacts when compared to better-performing students.

The other seemingly disengaged student from Learning Set C, however, became fully engaged within the group during the next module [see Figure 5.15, overleaf], but then became rather disengaged once more in the final module [see Figure 5.16], communicating with only one peer, again indicating a possible problem, either within the group or with that individual's engagement with the course. It is, perhaps, relevant that she actually intercalated during that final module, and did not complete the course until the following year.

Meanwhile, from Figure 5.15 [overleaf], it can be seen that all four Learning Sets were well-engaged in Module 2, with all students communicating with at least two or more peers. However, the communication with tutors in Learning Set B is of interest. The disengagement of the group's allocated tutor from active participation in the discussion board has already been identified [see Section 5.4b]. The impact of this disengagement can be further seen in the sociogram in Figure 5.15, from which it is apparent that this tutor only communicated with two students, being part of the largest group. A 'visiting' tutor answered a comment made by one further student, but this seems not to have yielded any further interaction. The tutors can thus be seen as being largely peripheral during Module 2, whilst all of the students in this group can again be seen to be engaging with more postings than the minimum requirement and communicating well within the group, whereby each student's network contained a minimum of 5 peers, potentially indicating a very close-knit community.

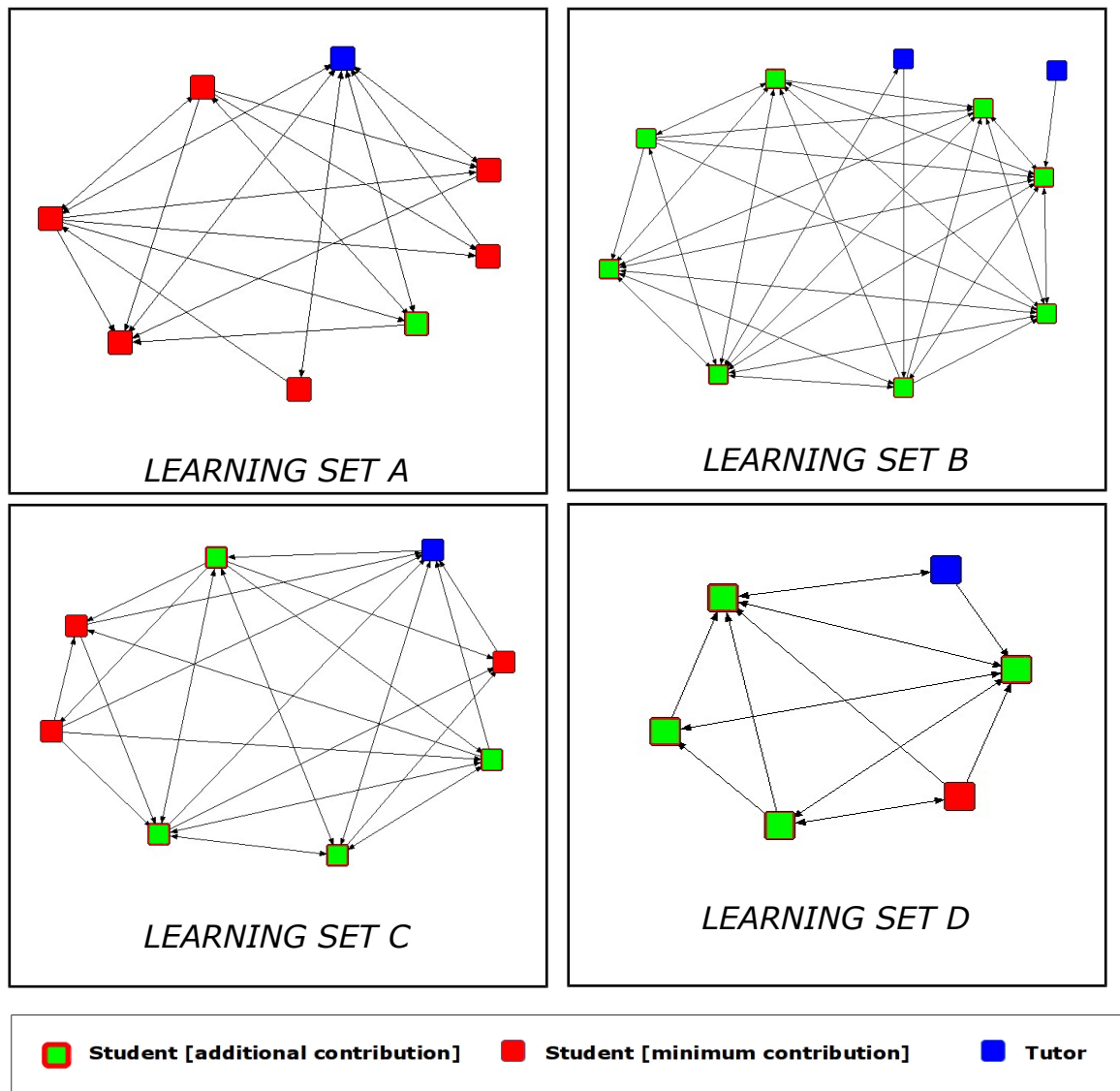


Figure 5.15: Sociograms of each Learning Set, Module 2

It is also interesting to note that the tutor in Learning Set D similarly only communicated with two students, although this was a much smaller group, so the impact and meaningfulness of this observation is uncertain. It is, however, also of note that the same thing also happened in Module 3 [see Figure 5.16] and yet no problems or difficulties have been identified for this group in previous analyses [eg: Sections 5.2 and 5.3]. It seems likely, then, that the tutor for Learning Set D can be regarded as at least partially engaged in both Modules 2 and 3.

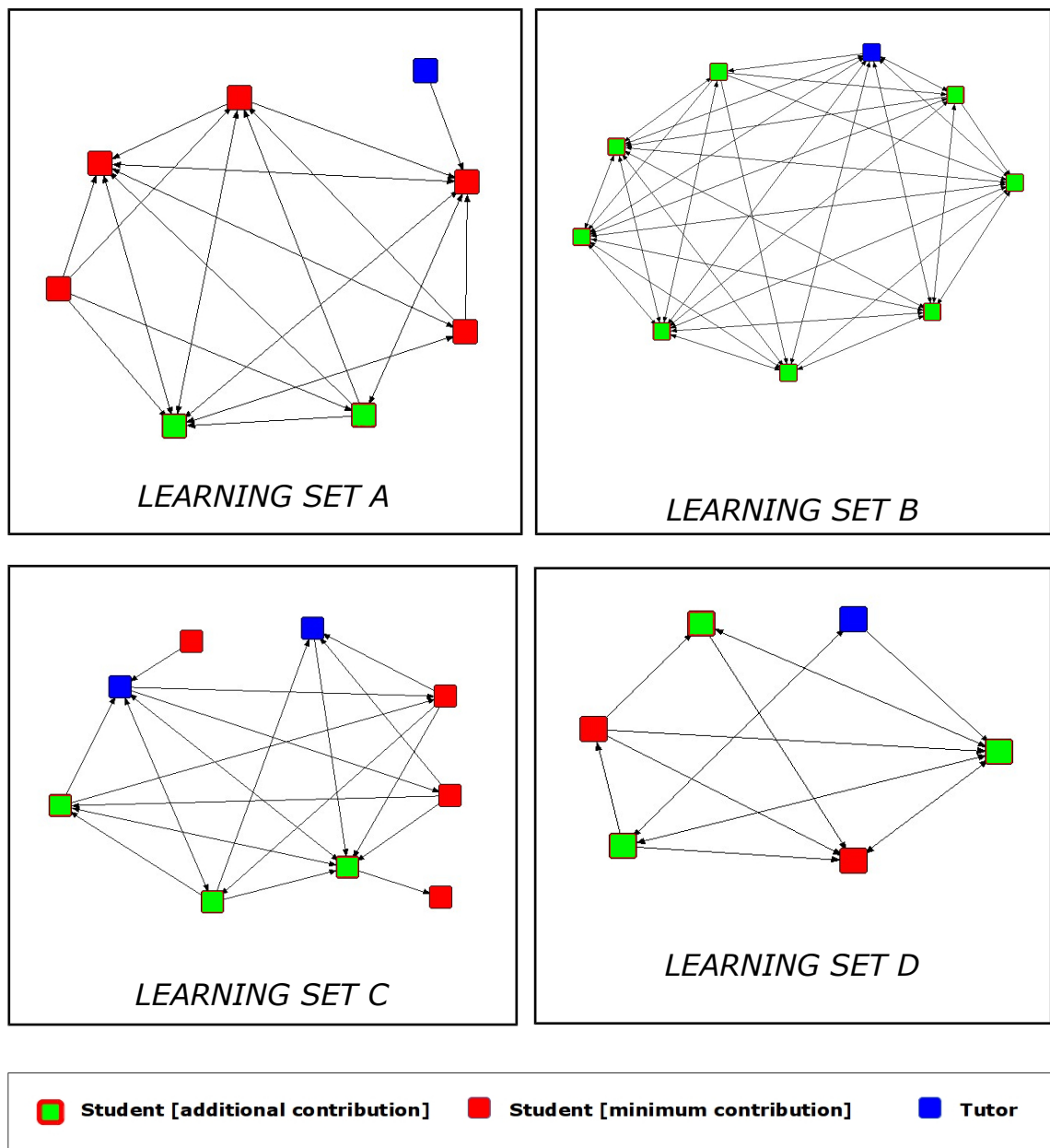


Figure 5.16: Sociograms of each Learning Set, Module 3

From Figure 5.16 [above], it can be seen that one additional member of Learning Set C seemingly disengaged from the group, communicating only with one of the tutors who had a presence in this group in Module 3. However, since she intercalated from the course during this module, this may be indicative of problems with the course rather than any uncomfortable group dynamics.

It can also be seen from Figures 5.15 and 5.16 that the two members of Learning Set C who spoke only to each other in Module 1 became fully engaged within the group in subsequent

modules, indicating that they were a little late in settling in, but had no actual problems with engagement either with the course or with the group.

Meanwhile, it can also be seen from Figure 5.16 that the tutor allocated to Learning Set A was hardly engaged during Module 3, communicating with only a single student; although this tutor [Tutor 3] can also be seen to have maintained a steady, 'low-input' profile in all modules [see Figure 5.13, above]. This does not seem to have caused any particular problems with group dynamics, with all students in Learning Set A communicating with a minimum of four peers during Module 3. However, there is no evidence that this tutor gave explicit notice to any of her groups that she would not be actively engaging in the online discussions (unlike Tutor 2, when attached to Learning Set B in Module 2); and it is especially interesting to remember that Learning Set A is the group, identified earlier, who failed to achieve 'Dialogue' in this final module [see Figure 5.4, above]. It might appear, therefore, that some level of leadership was lacking in this group during Module 3, whether from the tutor or from peer facilitators. This is considered further in Chapters 6 and 8.

Furthermore, Learning Set B can be seen again to have been highly engaged and well-integrated during Module 3 [Figure 5.16], with all students contributing more postings than required, and communicating with six or more peers. The tutor in this case appears also to be well-integrated in the group, and communicated with all 8 of the students.

As noted earlier, Learning Set C seemed to have some problems during Module 3, with two members becoming somewhat disengaged. However, the remainder of the group can be seen to have been well-integrated and engaged, with more than half of the group contributing more postings than required, and all communicating with at least three peers. There appears, therefore, to have been a 'core' group in this Learning Set, throughout the year, with whom other colleagues could engage peripherally.

5.7 Content analysis

5.7a *Student views of the tutor role*

The content of the online discussion boards was, as might be reasonably expected, focused largely on the course syllabus (*eg*: specific theories, set readings, or examples of teaching experiences) rather than on the participants' experiences of the course itself or their views

CHAPTER 5: DISCUSSION BOARD ANALYSIS

regarding the role of the online tutor. A significant exception, however, was a discussion activity during Module 2, when participants were invited to consider the affordances of information technology and e-learning, relating this to their own teaching context, in preparation for a summative assignment on this topic. All four Learning Sets spontaneously entered into an exploration of their own experience as e-learners, including (for Learning Sets B and C) a deconstruction of the tutor role. Since this was spontaneously shared information, it can be seen as a true representation of the views of the students, and, as such, is of interest to this study. Note that the extent to which this triangulates with the views expressed by the students during interview is considered during Chapter 6. Student names in the illustrative quotations are pseudonyms, designed to allow the natural flow of the conversation to be preserved.

A strong emergent theme was **tutor participation**. On the positive side, we have comments from members of Learning Set A (who, it should be noted, had worked with two of the most active tutors by that point in the course):

“The tutor participation in both modules so far has been excellent and the feedback from tutors has been very helpful.”
(Student, Learning Set A, Module 2)

“I find the feedback from tutors helpful and timely”.
(Student, Learning Set A, Module 2)

However, not everybody was satisfied with the level of tutor participation that they had experienced within the course. For example, these comments from students in other groups clearly indicated a preference for greater tutor presence:

“I think for me I occasionally would like a little more instant tutor feedback ... I think I am capable of seeking clarification where necessary but maybe sometimes I might want a bit more input”
(Student, Learning Set C, Module 2)

“There’s less tutor contact unless specifically requested”
(Student, Learning Set D, Module 2)

“I agree that if we are to learn about these subjects some guidance from the tutor would be desirable. Would it not lead to a more informed discussion and a deeper learning?”
(Student, Learning Set B, Module 2)

It is interesting to note that the first two of these comments came from groups who had worked, by that point, only with the two least active tutors, and the final comment came from the group

CHAPTER 5: DISCUSSION BOARD ANALYSIS

whose tutor had explicitly disengaged from discussions during that module [see Section 5.4b, above]. This, then, gives a lens onto the learning experience of the participants.

However, a third school of thought was also apparent within this theme, whereby students questioned whether any tutor input into their online discussions was really needed. This is illustrated by the following postings:

“Could I play devils advocate and suggest that Tutor input not absolutely essential ? Human nature being human nature we often feel we need positive reinforcement but in terms of the Web activities set so far is Tutor input absolutely essential ? I don't think so. I am learning from input of entire group and I don't think any of the discussion so far is way off base. The fact that we have come up with similar ideas and solutions would suggest we are on track.”
(Student, Learning Set C, Module 2)

“I agree that we are using the discussion board effectively already without being steered by a tutor”
(Student, Learning Set C, Module 2)

“The need for a tutor intervention should be kept to a minimum”
(Student, Learning Set C, Module 2)

These comments are especially interesting since they indicate a good level of engagement between group members, further suggesting that a strong sense of identity had developed in Learning Set C, and possibly also indicating formation of a community, via collaborative working and shared endeavour.

A second emerging theme was the **contrast between face-to-face and online courses**, and most especially **the use of email**, which also generated a mixed response on the part of the students. Some students felt that the online aspect of tutor contact, such as using email to replace face-to-face support was potentially problematic:–

“Whilst the support is only a phone call or an e-mail away, there is an added reluctance to contact tutors that would not be there if we were bumping into each other on a regular basis”
(Student, Learning Set D, Module 2)

“When you meet with a tutor regularly you build a relationship and have a better basis on which to ask for support both in terms of that and opportunities -in breaks or at end of class etc”
(Student, Learning Set D, Module 2)

“I like to have tutor contact so if I don't understand things or misinterpret them I can seek advice and if I see the tutor it reminds me to ask”
(Student, Learning Set C, Module 2)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

“Online you are more likely to find answers for yourself rather than ask as this involves writing an email”
(Student, Learning Set D, Module 2)

However, some students felt that the availability of tutors was higher by utilising email, and felt that this was a positive boon that online courses offer, for example, commenting on *“the added advantage of having tutors at the end of an email”* (Student, Learning Set A, Module 2). It is especially interesting to see that these students are from different groups than those who expressed misgivings, suggesting a distinct difference in their online learning experience:-

“Emails with tutors are an essential element to successful C&IT learning. The help from tutors is crucial and I appreciate the rapid responses received. It is certainly helpful to feel supported on a course like this”

(Student, Learning Set B, Module 2)

Another significant theme to emerge from these discussions was **the type of tutor input**. Interestingly there was a strong agreement, with no expressed dissent, that 'spoon-feeding' or didactic responses were not appropriate tutor interventions, but that students still needed some level of tutor support and guidance:-

“I enjoy a more flexible approach because I learn better if I find out things for myself, using a number of resources at a time to suit me. I do need some tutor input but if it's too structured or directed I feel as if I am being spoon fed”

(Student, Learning Set C, Module 2)

“It is not the degree of help eg I need to be spoon fed, more pointers in the right direction when I need it”

(Student, Learning Set C, Module 2)

“Tutor input is vital, I totally agree ... my personal perspective on tutor input is that it should be there when requested (eg when requesting help) and should be forthcoming within a short period of time. Otherwise ... a reply should be made providing direction rather than a didactic answer”

(Student, Learning Set C, Module 2)

Meanwhile, it was apparent that members of groups B and C, who engaged most with this discussion, had also given some considerable thought to the practicalities of the role of the online tutor, from the tutor's perspective, and had also drawn on scholarly literature to enhance their understanding of their experience as online learners. Illustrative comments that demonstrate this are:-

“The role of the tutor for online discussion is an interesting one. Some authorities suggest that the discussion should be allowed to flow without interference”

(Student, Learning Set B, Module 2)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

“It must be difficult balancing act for a tutor, whether to watch and see how the discussion is progressing, or intervene and redirect the course of thought”

(Student, Learning Set C, Module 2)

“My feeling so far is that web courses may be MORE intensive in tutor time than other types of course”

(Student, Learning Set B, Module 2)

However, it seems that not all students were convinced of this latter point, and indeed two students expressed some doubt regarding whether or not their tutor would actually read their contributions: “NB I wonder if [Tutor] will comment on any of this discussion?” (Student, Learning Set C) – interestingly, no response was forthcoming; and “...(this is not a criticism of tutors if you're reading)” from a student in Learning Set D. This point will be re-visited during analysis of student interviews [see Chapter 6].

5.7b Interaction and indicators of identity

The other main insight which can be gleaned from a reading of the postings from the online discussion boards is the way that students interacted, both with each other and with their tutors. From this, it is clear that the four Learning Sets had different 'characters'. For example, in Module 1, Learning Set A addressed a number of postings directly to their tutor, such as:-

“thanks [Tutor]; that is a very helpful feedback”

(Student, Learning Set A, Module 1)

“I agree with you [Tutor] that reflection needs to be guided ...”

(Student, Learning Set A, Module 1)

“Hi [Tutor] Thank you for letting us know of your availability. Would you be giving feedback to the activity I please?”

(Student, Learning Set A, Module 1)

This contrasts most starkly with the behaviour of the other three Learning Sets, who did not address their tutor at all in the first module, and did not manifest any particular need for the tutor's presence. This may suggest that members of Learning Set A, at this early stage in the programme, were somewhat more dependent on their tutor for guidance; whereas Learning Sets C and D seemed simply to ignore their tutor, whilst Learning Set B further evidenced a peer facilitator taking charge and welcoming a slightly tardy fellow student:

“Really glad to see you on the board Brian, I thought we had lost you!”

(Student, Learning Set B, Module 1)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

This posting is similar to one from a peer facilitator in Learning Set C in the following module, and evidences a strong feeling of identity, at least from the peer facilitators, as regards their groups:-

“Hi there Roger, Please be assured that your comments are being read and thanks for joining us !”
(Student, Learning Set C, Module 2)

Interestingly, all tutor postings were consistently ignored by this group also, and nothing was addressed to the tutor, with the exception of one (unanswered) query regarding the module calendar. It should, perhaps, be noted that Learning Set C is the group who also expressed doubts [see Section 5.7a, above] regarding the necessity to have a tutor to facilitate online discussions – although the fact that this one early query remained unanswered may, of course, have influenced whether or not members of this group chose to interact with or address any comments to their tutor during the rest of the second module, and this may also have coloured their view of the need for tutor intervention.

In contrast, one student from Learning Set D (an emergent Peer Facilitator in Modules 2 and 3) did respond to tutor postings on two occasions, although these replies yielded no further discussion. Other than this, the tutor was again ignored, and no postings were addressed to her.

It is also interesting to see that one of the students from Learning Set D commented that the group was becoming well-integrated, although no response was received, either agreeing or disputing this statement:

“When I was reading the paper (H Walton: Small Group Methods ...) I felt the Forming / Norming / storming ... part is already happening/happened in our group at this course. I hope people agree with me !!”

(Student, Learning Set D, Module 2)

Meanwhile, in the final module, Learning Set A also came to ignore their tutor, posting comments that referred to each others' postings, but not mentioning the tutor at all. This is a somewhat different response from their behaviour in the first two modules. Interestingly, it coincides with this group working with one of the less active tutors, who did not make any discussion board contributions during the first month of the module. Opinion is divided regarding 'when to jump in' (Mazzolini & Maddison, 2007). However, despite this tutor offering comments and questions thereafter, it appears that the group had, after more than four weeks on their own, already become self-sufficient. This could also be further evidence in support of Arbaugh's (2004) proposition that students need to take at least two online courses before they

CHAPTER 5: DISCUSSION BOARD ANALYSIS

are fully socialised into online learning (this being their third module). Indeed, members of Learning Set A interacted well with each other throughout Module 3, using vocatives and offering encouragement, and peer facilitators made regular postings, both academic and also social in content, such as: *“Season’s greetings to group A colleagues”* (Student, Learning Set A, Module 3). This latter comment is, perhaps a slightly more formal way of interacting than other groups manifested (for example, the less formal *“Just to wish everyone a very Happy Christmas and a great and successful New Year. Have fun!!!”* from a student in Learning Set D), but the choice of the word ‘colleagues’ can nevertheless be seen as a clear indication of some feeling of shared status and group identity.

Learning Set C also manifested something of a change in behaviour in Module 3, evidenced by postings directly addressing their tutor, such as:

“Dear [Tutor] Nice to hear from you especially so early on in the module”
(Student, Learning Set C, Module 3)

A further posting from one of the peer facilitators, offered encouragement to the tutor to remain engaged, and set out an expectation that differed markedly from the consensus reached in the previous module [that the tutor’s presence in online discussion was not necessary]:

“I have noticed that [Tutor] is a lot more interactive than previous tutors and provides an informal assessment of posted activities. This by itself will motivate learners.”
(Student, Learning Set C, Module 3)

However, despite this positive and optimistic view, it is clear that the tutor’s postings actually remained very largely ignored. The one exception was when the tutor engaged with something said by one of the main peer facilitators of the group, which prompted a reply addressed to both the tutor and the peer. Given the dearth of engagement with the tutor during the rest of this module, one wonders whether this tutor posting was only singled out for a response because of the association with a respected fellow student, and would otherwise have likewise been ignored.

Learning Set B, meanwhile, evidenced a very strong group identity, throughout the programme, but this was especially evident in the final module, when an early posting offered an invitation to their designated tutor to join them for the final module:-

“Hi. Welcome [Tutor] to set B, I hope you will enjoy being our tutor!”
(Student, Learning Set B, Module 3)

CHAPTER 5: DISCUSSION BOARD ANALYSIS

Interestingly, this message was posted by a 'regular' group member rather than by one of the main peer facilitators, although they, along with other members of the group interacted with the frequent tutor postings in this module, such as:

“A key question [Tutor] ... I guess you are guiding us towards the concept that ...”
(Student, Learning Set B, Module 3)

The behaviour of students from Learning Set B gives a clear indication of the fragile balance present in a buoyant discussion board, with a noticeable tendency, at two separate points during the module, for postings to become tutor-focused rather than addressed to the group as a whole. It is unclear, however, whether this was simply in response to numerous postings and questions generated by the tutor, or whether this was an acknowledgement of the tutor's authority, as possibly suggested by a comment from one of the main Peer Facilitators:

“PS. [Tutor]: I hope you do not mind all these diversions. We seem to be busier than ever on the message board in this module!” (Student, Learning Set B, Module 3)

However, this could possibly also be seen as evidence of the strength of the group's own identity, and of their explicitly choosing to become involved in discussions outside of the officially-set syllabus, indeed almost in contradiction to the tutor's authority.

A final posting from one of the main peer facilitators in Learning Set B makes very clear the group identity and sense of shared endeavour. The question of authority does, however, arise once more, since this posting comes across very much as that of a leader rather than a follower:

“To our learning set B. A rota disaster ... means that I shall not be joining you on the 4th Jan. Can I therefore take the opportunity to thank you all for your postings, thoughts, insight and general support over the last year. It has been a pleasure to read your posts and also to meet you in person. I cannot see myself as having got this far without your help. I would like to wish you all the best for the future.”
(Student, Learning Set B, Module 3)

Meanwhile, despite having not manifested any such desire or need in earlier modules, members of Learning Set D expressed a desire in Module 3 to see more input from their tutor, with comments such as:

“Feedback seems to be a hot topic at the moment, and I would agree that it would be nice to have feedback within the time limits set”
(Student, Learning Set D, Module 3)

“A little more from tutors would have been appreciated”

(Student, Learning Set D, Module 3)

However, they continued to respond to each others' postings, with vocatives and encouragement, and displayed no immediate need for the tutor's presence. Nevertheless, as in the previous module, students did respond to tutor questions whenever these were posed, such as the following comment, which is a response to a question regarding assessment of online contributions:

“[Tutor] is it possible to track online activity? this could be part of the assessment if it was not simply logging on but what the students were doing and perhaps working out hot times when more than one person would be online so it would be less asynchronous.”

(Student, Learning Set D, Module 3)

This response did not, however, generate any further discussion, despite showing some potential to 'open out' the discussion. This may be because the question in this posting was not answered by the tutor, despite inviting a factual response.

Overall therefore, it appears that the students had some differences of opinion, especially regarding the need for tutor intervention. Interestingly, they were clearly unafraid to share their views, even negative ones, in the 'public' forum of the online discussion board. The students' satisfaction with their learning experience during the year will be explored, via interview data, in Chapter 6.

5.8 Summary

The data presented in this chapter demonstrate stark and statistically significant differences in levels of activity and inter-activity across the student group – and indeed across the tutor group also. This seemingly also led to large differences in group cohesion and sense of community, and also the level of support available to individuals. In particular, we have seen that active 'peer facilitators' can compensate for a dearth of tutor facilitation, and that some students apparently viewed self-directedness as preferable to being tutor-led, whilst others seemed to be seeking a more passive experience. The views and beliefs both of students and tutors will be explored in the following two chapters.

CHAPTER 6: INTERVIEW DATA - STUDENTS

This chapter presents thematic analysis of the data obtained from interviews with students (including self-administered interviews, collected in questionnaire style, as discussed in Chapters 3 and 4). Again, as with Chapter 5, it should be noted that there were no issues of inter-rater reliability to overcome, since all analysis and coding for this study has been carried out by a single researcher (myself). The analysis presented, however, was carried out as an extensively iterative process, rather than in a single phase of work, in order to ensure the robustness and trustworthiness of the analysis. For verbal interview data, this has been further enhanced by referring to the audio recordings alongside the typed transcripts, to assist in fully understanding the nuances of speech, and thus aiding the accurate interpretation of each interview. Illustrative quotations are again used in this Chapter, to represent the views expressed during the interviews. All names have been removed, and pseudonyms inserted where needed to maintain the flow of conversation, whilst protecting the identity of individuals.

6.1 Interview Data

In total, interview data were obtained from 24 of the 33 student participants (14 female, 10 male), including a minimum of five from each of the four Learning Sets. This represents 73% of the total cohort, and includes students who achieved each of the four possible grades (Distinction, Merit, Pass, Refer). The interview sample also includes 4 students who intercalated from one or more modules, as well as 20 students who successfully completed the whole Postgraduate Certificate within the year. The professions of interview respondents were also largely representative of the whole population, as shown in Table 6.1 overleaf.

Face-to-face interviews were all recorded using a simple digital dictaphone, with the express permission of participants, and later transcribed verbatim into written format. The minimum length of interview was 31 minutes, and the maximum was 110 minutes. Apart from 2 outliers, the interviews ran for between 35 minutes and one hour; with a mean value of 52 minutes, and a median of 48 minutes. As noted above, the audio recordings were specifically referred to when analysing the written transcripts, to aid the nuanced interpretation of data.

CHAPTER 6: INTERVIEW DATA - STUDENTS

	Doctors	Dentists	Nurses	Allied Health Professions	Total
Learning Set A	3 (of 4; 75%)	0 (of 1; 0%)	1 (of 2; 50%)	1 (of 2; 50%)	5 (of 9; 56%)
Learning Set B	4 (of 4; 100%)	1 (of 1; 100%)	2 (of 2; 100%)	2 (of 2; 100%)	9 (of 9; 100%)
Learning Set C	3 (of 5; 60%)	1 (of 2; 50%)	1 (of 1; 100%)	0 (of 1; 0%)	5 (of 9; 56%)
Learning Set D	2 (of 2; 100%)	1 (of 1; 100%)	1 (of 2; 50%)	1 (of 1; 100%)	5 (of 6; 83%)
TOTALS	12 (of 15; 80%)	3 (of 5; 60%)	5 (of 7; 71%)	4 (of 6; 67%)	24 (of 33; 73%)

Table 6.1: Profession of interview respondents in each Learning Set

6.2 Thematic Analysis

As noted in Section 3.8a, the emerging themes arising out of the analysis of transcripts and recordings of student interviews have been grouped and presented using a Thematic Network approach (Attride-Stirling, 2001). Under this approach, each thematic network is described by a single, overarching Global Theme, which is then divided into a number of Organising Themes, themselves further sub-divided into a series of Basic Themes.

In this Chapter, all four Global Themes and their associated sub-divisions are presented in turn: Online Discussion [Section 6.3], Student Engagement [Section 6.6], Tutor Engagement [Section 6.9], and Need for Tutor Intervention [Section 6.13]. All of the themes that make up the four thematic networks are summarised in Tables 6.2 - 6.5, overleaf:-

CHAPTER 6: INTERVIEW DATA - STUDENTS

THEMATIC NETWORK 1		
Global Theme	Organising Theme	Basic Theme
Online Discussion Board	Purpose/Function of online discussion	Structure
		Reflection
		Curriculum
		Personal Interaction / Group Bonding
		Debate
		Assessing Progress
		Distraction
		Safe Place
		Sharing
	Students' Experience of Online Discussion	Disappointment
		Satisfaction / enjoyment

Table 6.2: Thematic Network 1: Online Discussion Board

THEMATIC NETWORK 2		
Global Theme	Organising Theme	Basic Theme
Student Engagement	Student Interaction	Collaboration & Sense of Community
		Group Identity
		Face-to-face meeting / building rapport
		Peer facilitation
		Notice Board
		Lack of interaction (Isolation / Frustration)
		Time/timing of postings
		Length of postings
		Professional Groups
		Development
	Students' Experience of Change During the Course	Confidence
		Learning
		Withdrawal

Table 6.3: Thematic Network 2: Student Engagement

THEMATIC NETWORK 3		
Global Theme	Organising Theme	Basic Theme
Tutor Engagement	Tutor Presence	Lack of Evidence of Presence
		Evidence of Presence
		Enthusiasm
		Student Satisfaction
		Power & Authority
		Peer Relationship
	Facilitation Style	Questioning , Inviting Discussion
		Summarising, Closing Down Discussion
		Postgraduate Level /Spoon-feeding
		Tutor Feedback
	Outcome of Tutor Engagement	Impact of Tutor Intervention
		Perceived Tutor Role

Table 6.4: Thematic Network 3: Tutor Engagement

THEMATIC NETWORK 4		
Global Theme	Organising Theme	Basic Theme
Students' Need for Tutor Intervention	Seeking Active Tutor Intervention in Online Discussion	Stimulating / Challenging
		Reassurance / Expertise
	Not Seeking Active Tutor Intervention in Online Discussion	Interference
		Individual Contact / Support

Table 6.5: Thematic Network 4: Students' Need for Tutor Intervention

6.3 Global Theme 1: Online Discussion

The first global theme is focused on the **online discussion board** itself, and students' beliefs, understanding and experiences thereof. The students' varied and undirected responses have then given rise to the range of Organising Themes and Basic Themes presented in Sections 6.4 and 6.5, which are presented graphically as a thematic network (Attride-Stirling, 2001) in Figure 6.1, overleaf:

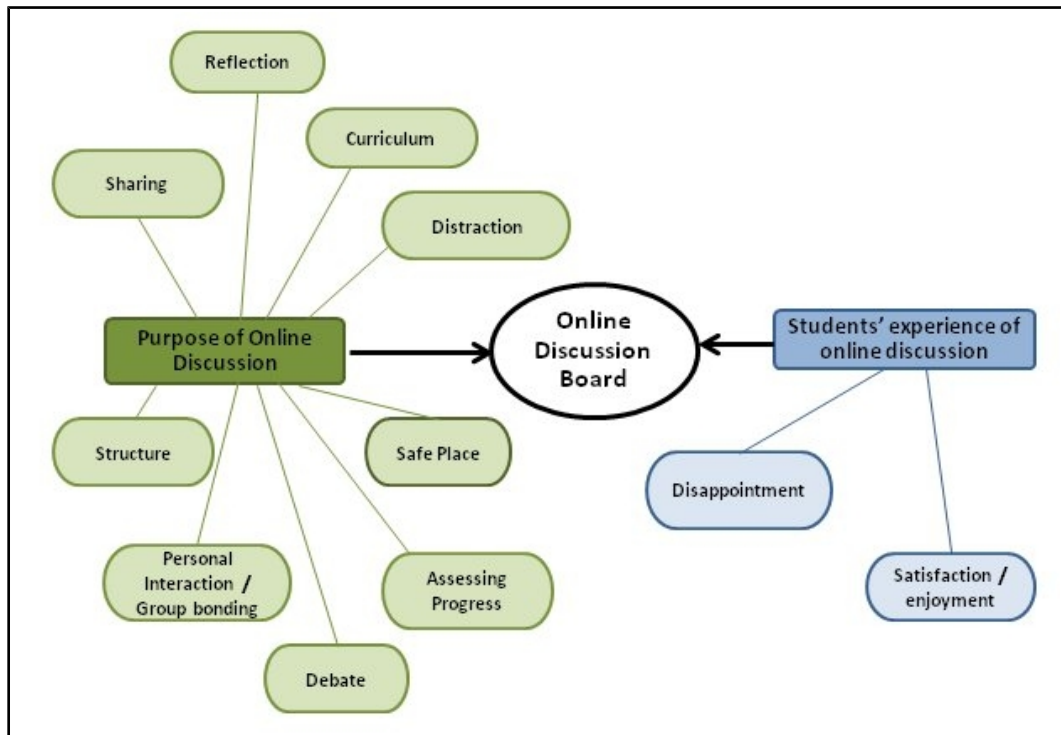


Figure 6. 1: Thematic Network 1, Global Theme: Online Discussion

This global theme was introduced by direct questioning into all student interviews, with the initial open-ended question “Tell me about the online discussion board – anything you like, just whatever springs to your mind” [see Appendix I for interview questions].

6.4 Organising Theme 1.1: Purpose/Function of Online Discussion

A total of 9 Basic Themes were identified as making up the Organising Theme of '**purpose and function of online discussion**'. All 24 of the students interviewed gave their differing views regarding this aspect of the course. In some interviews, the subject of underpinning purpose arose spontaneously, when participants were commenting on the online discussion board and their experience of it during the year. Where their views had not already been articulated, they were specifically prompted during the interview to consider this aspect of the course.

6.4a Basic Theme: Structure

A major emerging Basic Theme was the '**structure**' which participants felt the course gained from their regular contribution to the pre-set online discussion activities. This was

acknowledged as a positive aspect by the majority of students, who were, it should be remembered, studying primarily as distance learning students, with only very occasional face-to-face sessions (only 5 during the year-long course). This theme can be illustrated by the following comments:-

“I think its useful as a staged way of learning, and I think all of the Activities for the Discussion Board contributed to your thought for your Module” (Participant 1)

“its got a kind of programmed element in, to set the pace to the learning, so its got a timetable, it gives people order and structure. Sometimes, with e-learning it can be missing, because you don't turn up with the attendance sheet for your lectures and your tutorials ... it sets the rhythm of how you go about it” (Participant 7)

“I think it keeps you going through it as well, and by giving a structure, there's a chance that everyone could be talking about the same thing at the same time” (Participant 28)

6.4b Basic Theme: Reflection

A second Basic Theme to emerge within this thematic network was that of '**reflection**', which a number of students identified as a key approach for the course itself, and also a valuable aspect of the online discussion activities. This is encouraging for the course team, since supporting reflective learning was one of our objectives in setting up the online discussion board. Typical responses under this theme are as follows:-

“I think it's structured to help you question what you think about education, how people learn, different learning styles. I think it's meant to keep you reflecting when you're doing it and experiencing it” (Participant 23)

“its more of a group discussion, where you're sharing ideas, because as somebody says something, someone else comes up with something 'oh that's a good thing', and it sort of develops you more, and you reflect more as well” (Participant 18)

“obviously to encourage reflective learning, which I think is such a fundamental aspect of the whole course, really, which is interesting because its something that you do, but you've never written down or read theory about, but you did anyway - which is, once again, quite refreshing. So I think the purpose of it was to encourage reflective learning” (Participant 16)

6.4c Basic Theme: Curriculum

A slightly less common but still important theme to emerge was that of coverage of the 'curriculum', which a number of participants recognised as arising, at least in part, via the pre-set discussion activities. Typical comments illustrating this insight are:-

“any course has to be credible, so has to get you through quite a number of different issues. It’s the [online discussion] topics that make the course worthwhile and the best way to demonstrate that people have made an effort to cover these subjects with it being an online course”
(Participant 16)

“to get people to move through the content of the thing ... some of them [discussion activities] were clearly designed with the final assignment in mind, so that it actually moves you through a process, actually – think about this, think about this, think about this”
(Participant 10)

“there are several purposes behind it, one is to guide you in covering part of the curriculum that you have set.”
(Participant 24)

Interestingly, one student commented positively on the breadth and consolidation of learning provided by the online activities, as opposed to just the final assignment, which indicates that he had understood, at least in part, the wealth of opportunity offered by this aspect of online learning:-

“it gave you a way of letting your thoughts solidify, because you then have to put something down, related to what you’ve been reading about for those few weeks, and so you’d write down an experience or your thoughts about this or what you’d researched, and simply the process of doing that away from doing an essay allowed you to sort of give it an extra layer of thought - an extra layer of processing - so you’d thought through it a bit more”
(Participant 28)

However, this is in sharp contrast to the strategic approach to the course adopted by certain other students, who seemed to believe that the end product (assessment) was of greater significance than the learning process they engaged in along the way, with no apparent understanding that the curriculum as a whole was larger than the final assessment – for example:-

“I thought that all the activities were basically branches or tributaries that would pour into, and basically guide me through the module essay, final assignment”
(Participant 9)

6.4d Basic Theme: Personal Interaction / Group Bonding

Another strong emerging theme, although not always presented from the same point of view, was that of '**interaction and group bonding**'. Some students felt that the online discussion board was inherently suited to supporting the interactions of people within their allocated Learning Sets, and that this can also alleviate the isolation that could arise from engaging in a distance learning course. These views are typified by the following comments:-

“[online discussion is] to encourage participation in topics and bring the group closer together”
(Participant 6)

“I suppose there are many purposes. One is to try and alleviate the isolation of distance learning. When you're a student at college or university, you're in groups, and there's time and contact time where you can discuss topics, particularly if there's anything that anyone's struggling with, and you can get different people's viewpoints, and kind of bounce ideas off each other. When you're doing distance learning, you don't have that kind of opportunity, and it is valuable to have that - and the discussion forum forces people, if you like, to make those interactions.”
(Participant 11)

Some students felt that this interaction should encompass a social aspect – as, indeed, has been suggested by the requirement for 'Social Presence' in the Community of Inquiry (Rourke et al, 1999) and also in Wenger's (1998) notion of social learning within the Community of Practice [discussed in Sections 2.2a and 2.3a]. This view can be illustrated by the following comments:-

“I think its to create a virtual meeting place, where people can react socially in an e-learning environment”
(Participant 19)

“I find that you need to have a point of contact that is not to do with work, something you can talk about, that you both have an interest in”
(Participant 28)

However, other students felt that there was no need for the social aspect of interaction, and that discussion board postings should be limited to the set course tasks.

“I don't particularly think there should be any social bits should be on the activity discussion board. I think a lot of people may not be interested in it ... If I'm doing a course I like to get on with my course ... if people want to talk about holidays there is the email side of it, and the discussion board is for discussing the activities ... like there was a couple of us who'd have a bit of banter about the football, but we'd do that through the email. But I wouldn't dream of putting it on the activity board unless it was related in some way”
(Participant 14)

“they certainly got on really well, and that was obvious from the postings, which included things about people's new mountain bikes and all this kind of stuff, which would have been probably better in another forum”
(Participant 11)

This has a much more strategic feel to it, and although the aspect of 'shared endeavour' might qualify under the requirements for a 'Community of Practice' (Wenger 1998), the extent to which a sense of community has truly formed for these students still seems somewhat questionable – as indeed one respondent commented:-

“I think it was a set of transactions, I don't think there was much feeling of gelling ... it was all engagement with the task”
(Participant 7)

6.4e Basic Theme: Debate

Another aspect of the online discussion activities which was frequently referred to by students was the notion of engaging in '**debate**', and this therefore became a further Basic Theme. Illustrative comments from students are as follows:-

“I thought it was to promote a discussion between the group members ... that's the way I looked at it, because I didn't think it just for you to put a posting and forget about it, I didn't look at it that way. I thought it was more like promoting discussion, see what other people think”.
(Participant 12)

“what I would be looking for in terms of putting it together is debate, I'd be looking for somebody to say 'no I disagree with you, this is what I think here is why I think it', and then somebody else can come in and say 'I take your point, but have you considered this?’”
(Participant 29)

“the purpose of online discussion to me would be to formulate a discussion with a number of people that was ongoing, as opposed to just throwing comments at each other and saying 'yes I agree', or 'no I don't' - opening up full discussion rather than throwing one-sentence answers at each other”
(Participant 3)

“when it came to the Discussion Board, I thought that possibly we'd be putting ideas in and almost like criticising each other – in a nice way, but saying 'what do you mean by that? And what do you think?’”
(Participant 18)

Some students identified a positive impact of engaging in such debate, which reflects a strong level of engagement with both the course ethos and the learning opportunities offered by the online discussion board, and furthermore, also resonates with the proposition of Ryman and colleagues (2009) that debate is key to achieving deep, transformative learning. For example, one student explained its potential thus:-

“to interact with your colleagues so you formulate your ideas and you work through them. You might need to change something, you might need to reflect, you might need to listen to somebody else's point of view and hopefully you might be challenged to go

off and read something else if you've been really challenged, and come back and use it to reinforce what you have actually learnt." (Participant 24)

Other students, however, had experienced the online discussion and the opportunity for debate differently. Their experience also links closely to the strategic task-focused approach identified in the previous Basic Theme on interaction [Section 6.4d, above], and indicates that not all students had fully embraced the opportunities offered by online discussion – and some students also had a retrospective awareness of this, for example:-

"people were being very factual and descriptive, about what they do and about how the education applies to it, and you were dealing with it in that level. But I feel there were times that people might have got more in depth, you know this idea of deep learning and that might have occurred through a lot of challenging, bringing the emotional side into it more." (Participant 7)

6.4f Basic Theme: Assessing Progress

Another important emerging theme was the acknowledgement, by a substantial number of students, that the online discussion activities, which happened regularly throughout each module, could therefore be a tool for '**assessing progress**'. This Basic Theme can be illustrated by the following comments:-

"I didn't think that the content was being judged, and I thought that probably the teachers were more interested in making sure that, as part of the criteria of the course, that people had engaged with it, and as long as you'd put that posting in, then you could have your tick to say you'd engaged" (Participant 1)

"It can show strengths & weaknesses in individuals without a sense of scape-goating – by this I mean only the tutor & the student know the student's progress because this can be done by E-mail away from the discussion board but as a follow-on from the board" (Participant 32)

"I think they [tutors] probably pick up quite easily on the discussion board, if they [students] are on the right track or not, and nip it in the bud" (Participant 25)

Another interesting aspect of this theme was that some participants recognised that this could not only be a tool for tutors to use in monitoring the course, but that students could also self-assess, which is in keeping with the autonomous self-directed approach that some students clearly expected to take, as mature postgraduate professionals:-

"is it us showing the facilitators how we are getting on, or is it to show ourselves how well we are getting on?" (Participant 24)

“at some stage is there something about self evaluation? is there a point within each of the activities, as well as a set of questions?”
(Participant 7)

6.4g Basic Theme: Lack of Purpose / Distraction

A small number of participants seem not to have understood the purpose of the set online discussion activities as learning events, and regarded them instead as a '**distraction**', getting in the way of their completing the important element of the coursework - the summatively marked assignment. This therefore became a further Basic Theme. These individuals tended to take quite a strategic approach to their learning and to completion of the course overall, and their views are illustrated thus:-

“My initial perception was that the online discussion would help me write the essay and pass the module. As time went on, the way I see it, it was a bit of a distraction, an extra workload, which hasn't contributed into helping me or enabling me to write the essay”
(Participant 9)

“Because we didn't have so much time for the assignments at the end ... if I was concentrating on these last 2 postings it would have distracted me from the work I had to do. So that was the only reason that I didn't reply to those last 2 postings”
(Participant 13)

Interestingly, one highly strategic student seemed to view the discussions not only as a distraction and potential draw on his time, but also as a place only to exchange factual information. Clearly, this meant that he did not learn from others' shared experiences, making minimal contributions himself, only to conform to the requirements of the course, rather than engaging in dialogue and exploration with fellow students:-

“I find them a bit too time-consuming ... if I find something that I know specifically about, and people ask questions about, then I will reply, but I tend to keep my mouth shut most of the time ... I tend to go to discussion boards if I am actually looking for information, rather than to contribute. ... my motivation for being on that board was not because what people said was particularly interesting ... my motivations for posting were because I had to post, rather than because I wanted them to know what I thought”
(Participant 19)

6.4h Basic Theme: Safe Place

In direct contradiction to the previous theme, some students found the discussion board to be a valuable '**safe place**' for sharing experiences and developing their ideas, which was thus

classified as a further Basic Theme. This positive viewpoint is typified by the following comments:-

“it really is to encourage a space where people can basically make lots of mistakes, without fear of actually causing themselves any long-term problems in terms of marks or assessment”
(Participant 10)

“I think the best thing is sometimes you can have time to think, before you actually comment. If you do face to face, or in a telephone conversation, you can't always go away and check some things. I thought it was a good thing”
(Participant 25)

Thus, it is apparent that opinion was divided amongst the student body, between those who appreciated the online discussion board [typified by the current Basic Theme: 'Safe Place'] and those who felt it to be simply a hurdle to be passed [illustrated by the previous Basic Theme: 'Distraction']. This will be discussed further in Section 6.5.

6.4i Basic Theme: Sharing

Another strong Basic Theme to emerge was that of '**sharing**' of experiences and ideas, especially from different professions, which a number of students reported finding a valuable enhancement to their learning. Typical comments are:-

“I'd say a cross-fertilisation of ideas, its to get the Group thinking together, and talking about issues and bringing up ideas and sharing information sources, talking about how it affects them”
(Participant 28)

“I thought that the online discussion activities were designed to give participants contact with each other, and thus exposure to different ideas. Without this, you might as well just read a book.”
(Participant 4)

“its also collaborative isn't it, because you can learn a lot from your colleagues and certainly from my peers, then I've picked up quite a few things that I now use on a regular basis – and you know, sharing across specialties and professions has been very valuable”
(Participant 10)

This reported learning experience reflects the intended social constructivist approach of the course, which has also been discussed elsewhere (Sherratt, 2012), and is further typified by the following responses:-

“you can get different people's viewpoints, and kind of bounce ideas off each other ... you get other people's sort of 'takes' on particular topics, there were a few bits of quite useful information that came from other people, and I thought 'oh yes, I hadn't thought

of that, that's interesting', and some useful references. So it worked quite well in that respect." (Participant 11)

"its more of a group discussion, where you're sharing ideas, because as somebody says something, someone else comes up with something 'oh that's a good thing', and it sort of develops you more, and you reflect more as well" (Participant 18)

"there was a lot of shared learning going on, and so there was a lot of information I was unfamiliar with ... you know, learning from the group members, I suppose I was learning as well. ... there was shared learning going on. I learnt things from other disciplines that I wasn't familiar with" (Participant 17)

However, not all students agreed with this positive attitude of learning from sharing. A small number of respondents expressed a different, and far less satisfied view of the online discussion activities, indicating that the theme of sharing was not universal, or at least, not perceived as a universal boon - for example:-

"I found that, despite the fact that I have contributed to, well if not all, then most of the activities, I don't think I've quoted anything from the online discussion in my assignment, or somebody has mentioned something on the discussion board that made me change my mind about what I was going to write" (Participant 9)

This latter comment is especially interesting in that it contradicts the findings of MacNeill and colleagues (2014) that a collaborative (as opposed to individual) online learning experience was much richer and therefore inherently suited to higher-order thinking, analysis and application.

6.5 Organising Theme 1.2: Students' experience of online discussion

In discussing the online discussion board, students tended to explain their responses with reference to their individual experience of such discussion activities, and this therefore became a second distinct Organising Theme. Interestingly, this encompassed two diametrically opposed Basic Themes: '**Disappointment**' and '**Satisfaction/ Enjoyment**', seemingly dependent on the extent to which their expectations had been met. This was explored via probing during the interview, if it had not been fully articulated already, with questions such as "*did you have clear expectations of what would be involved?*"

6.5a Basic Theme: Disappointment

The first Basic Theme to emerge within this section of the thematic network was '**disappointment**' with the level of engagement and participation in the online discussions by

CHAPTER 6: INTERVIEW DATA - STUDENTS

group members, leading some students to comment that their expectations had not been met, or perhaps not met fully. This experience is illustrated thus:-

“Primarily, I thought it would help me build up some background knowledge ... but I don’t think it has met my anticipations or expectations I should say, in that it would lead me to write a better essay for the module”
(Participant 9)

“I got what I expected from e-learning ... this was what I wanted, and I thought the actual material was very well presented ... but I suppose I expected more from the Discussion Board – that was the disappointing bit”
(Participant 18)

For some students, it was the medium itself, a text-based asynchronous discussion board, which was the cause of their disappointment, since they felt that this did not support or encourage conversation between participants. [Note that views of the discussion board medium itself will also be discussed further in Section 6.7]. These views can be illustrated by the following comments:-

“I think the Discussion Board was quite an impersonal sort of process of communicating”
(Participant 1)

“a discussion board is stolid, because everyone is picking their words slowly. It puts more intellectual weight in, but it takes a bit of the spontaneity and a bit of the discussion side of it and the chance to have some of the conflict. Whereas a discussion where you are actually typing in real time is like a game of squash, the discussion board is something slower, its much more like chess, you know, its not very exciting”
(Participant 19)

Other students, however, found that their disappointment lay rather in the reluctance of their fellow learners to fully engage in discussion, which also led to less of a feeling of community, for example:-

“nobody ever bothers replying anyway, and I just found myself thinking there is no point at the end of it”
(Participant 3)

“I found it very difficult to sustain discussion within our group ... you would be talking to other learning sets who were saying they were having loads of conversation on the discussion board, it was an actual discussion, whereas what I found with our Learning Set was very much ‘I’ve posted my answer to one of the questions, now that’s it, I’m not going to respond again’. It was very rare that you get any kind of interaction on it ... It was very much staccato answers, lets move on, lets not even bother to talk about what somebody else said”
(Participant 29)

And for some students, the fault for this lack of engagement by fellow learners lay in the hands of the tutors, who did not always take an active part in discussions - a view which resonates, for

example, with the findings of Celentin (2007), that student interaction is influenced by tutor intervention; and also with the suggestion from Bogler and colleagues (2013) that student satisfaction is also influenced by tutor engagement. [Note that the theme 'Tutor Presence' is discussed in detail in Section 6.10, below]. This was a recurrent, although not universal complaint, which can be typified by the following comment:

“I was quite disappointed by the limited attempts made by the tutors through the discussion board ... I think it contributed to us continuing to function as individuals rather than as a group, and I think more involvement from the tutors would have brought the group together”
(Participant 30)

6.5b Basic Theme: Satisfaction & Enjoyment

However, a sizeable number of students felt that their experience of the online discussions had been highly positive, and that their engagement with them, and with each other, had enhanced their overall learning experience. This viewpoint therefore gave rise to the Basic Theme '**satisfaction and enjoyment**', and can be illustrated thus:-

“I wouldn’t have liked to have done the course without the Discussion Board, in any way, shape or form”
(Participant 10)

“I thought that the online discussion activities were designed to give participants contact with each other, and thus exposure to different ideas. Without this, you might as well just read a book.”
(Participant 4)

“[Online discussion] keeps people 'connected' which is good when you feel a bit adrift”
(Participant 32)

“I enjoyed using the Discussion Board. I say that because for me at least, it provided a better way to engage in some of the material that we had read. I find that just reading something is good, but for me more learning takes place when you have to explain it or talk about it, or think about what you think about it, and the Discussion Activities, in the main, encouraged that”
(Participant 15)

6.6 Global Theme 2: Student Engagement

The second Global Theme is focused on different aspects of **student engagement** with the course. This gave rise to two Organising Themes, and a total of 13 Basic Themes, which are presented graphically as a thematic network (Attride-Stirling, 2001) in Figure 6.2, overleaf:-

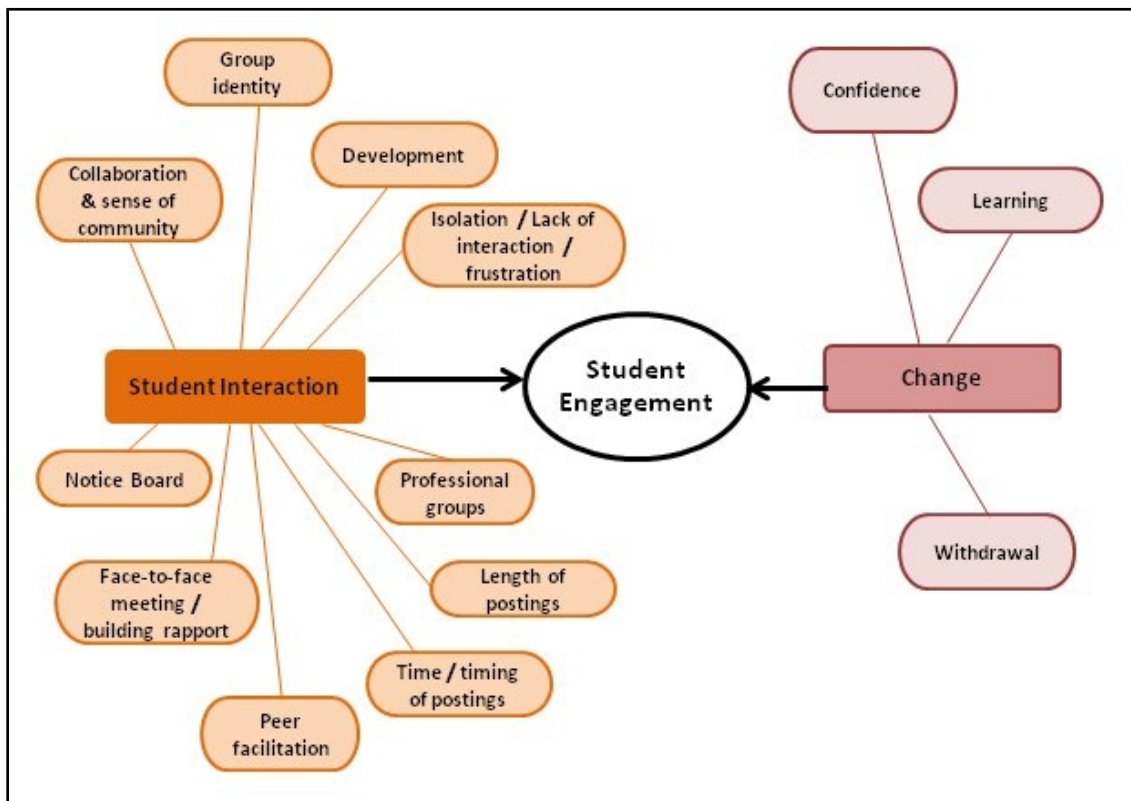


Figure 6. 2: Thematic Network 2, Global Theme: Student Engagement

6.7 Organising Theme 2.1: Student Interaction

In the first Organising Theme, '**interaction**' is interpreted quite broadly, using Moore's (1989) definition, to include consideration of students' interaction with the course itself as well as with other participants (both students and tutors).

6.7a Basic Theme: Collaboration & Sense of Community

The first major Basic Theme to emerge is that of '**collaboration and sense of community**'. For some students, their experience was highly positive, and a good sense of community and active collaboration could clearly be identified. This experience is typified by the following comments:-

"we built up quite a relationship over the year, I think, But the online discussion board helps though. You're just not isolated. You're not doing it on your own. You get to know people"
(Participant 16)

"I think it worked quite well as a group. Also we had some people who had some vast experience with teaching, whilst some, for example me, had little teaching, but overall,

CHAPTER 6: INTERVIEW DATA - STUDENTS

we worked well, because people wanted to learn. I wanted to learn what teaching is like in the ambulance service as well, and what its like in dental, so in a sense, you could see this from the discussions, which were ongoing ... you are literally trying to achieve the same goal, you have the common goal that brings you together”

(Participant 12)

“you felt that you knew this group of people quite well ... I think our Group gelled very well, I think I was lucky. We had a really good group. I think we lost a couple very early on, but everybody that was left, without exception, contributed to the discussions”

(Participant 15)

“maybe I got more from the course because of the group ... reading postings, looking at their experiences - I feel as if sharing their experiences with me, they didn't realise how much I was learning from them, and I hope they have learnt from me ... I was interested in what they had to say”

(Participant 13)

However, it was apparent that for some students, this collaborative experience and sense of community, whilst still highly valued, was based within a sub-group rather than encompassing their whole Learning Set. For example:-

“I think that 4 of our group-mates seemed to have better rapport with each other, and we normally would respond to a particular issue by quoting the person's name, and I suppose one could sense the familiarity in the way how we responded.”

(Participant 30)

“There was maybe 5 or 6 of us I think, on an absolute regular basis ... and there was maybe 3 of us out of that regular group that would speak to each other and respond to each others' work”

(Participant 3)

“maybe there were two or three key members, and you knew they were going to be the ones who'd enter in the discussion, take it seriously”

(Participant 18)

“there was a core of three, we functioned as a group, then towards to the end some more people did come on board, but not in a significant way”

(Participant 24)

For those students who were not part of these sub-groups, however, the experience was sometimes less satisfactory, for example:-

“those two obviously hit it off really well, and everyone else just seemed to put little bits in, so it wasn't really a discussion group, it was the 'Jack and Jill Show', with everybody else every now and again sort of throwing something in.”

(Participant 11)

“I think there were certainly two who worked very well together, but really just putting other people on the periphery”

(Participant 14)

There was also one especially interesting comment, made by a student who apparently did not experience a sense of community, offering the insight that doing the same thing at the same time does not actually equate to collaboration:-

“the feeling was much more of a large group of people going to a rugby match rather than an Amish barn-raising - everybody was going in the same direction for the same reason, rather than all working together to build one thing ... everybody was still going together, but I didn’t get the feeling that there was that much interaction, in terms of trying to build that thing together”
(Participant 19)

However, this may, in part, be explained by the formal assessment requirements of the course, since the assignments were submitted by each individual student, and not as collaborative group-work, and this may, therefore, have inhibited some students from sharing their ideas and insights fully, within the online discussion board [as discussed in Chapter 2]. This is illustrated by the following comment:-

“we are all part of the same cohort, but its me who has got to do it at the end of the day, not us as a group”
(Participant 29)

6.7b Basic Theme: Group Identity

Another important Basic Theme to emerge was '**group identity**', which is related to the previous theme, but yet distinct from it. It is clear from the interviews that different levels of group identity were experienced by interviewees. For example, 8 students referred to the Learning Set as '**the** group', whereas 6 referred to it as '**my** group' and 8 as '**our** group'. This choice of personal pronoun can offer a lens onto the extent to which each individual felt truly embedded as part of the group, further exemplified by two students referring to '**our tutorial group**', and a further three talking about '**the team**'. However, not everyone felt this strong sense of group identity, for example:-

“I personally didn't feel there was great benefit to carry on with the same group, through the 3 modules ... I'm not saying I had problems with any individual, but I think you could quite easy have moved people around. I think the limited amount of group bonding that occurred on the direct contact days wasn't sufficient to regard them as longer term propositions”
(Participant 7)

Furthermore, at the far extreme, one student's initial response was to comment that “**they** were a nice group” (Participant 19) [emphasis not in original], indicating a strong feeling of disengagement from the group. This, then, is a potential cause of concern, since some authors, such as Wegerif (1998) [discussed in Section 2.3b], have proposed that successful asynchronous

CHAPTER 6: INTERVIEW DATA - STUDENTS

discussion is largely dependent on students feeling like 'insiders' as opposed to 'outsiders'. However, from other interviews, this lack of group identity appears to be a minority viewpoint, as shown by the following more positive comments:-

“by the end of the year I would certainly identify myself with my Learning Set, so in that respect I would say it is a group thing, but it probably took the year to feel like that”
(Participant 1)

“once you get to know the group its not like you're away ... whether you are in Widnes or you are in Malta, or in Plymouth”
(Participant 31)

“we knew each other fairly well by the end of the course itself, so that changed a little bit as well”
(Participant 12)

“I didn't feel as though I wasn't part of the group. I wasn't part of the discussion, but I didn't feel like an outsider in the group. The group was great ... I didn't feel that I wasn't part of it at that point, because I was reading things, but I wouldn't necessarily put my own responses onto the discussion board. I was reading what other people were writing, but then not submitting things myself”
(Participant 25)

“even through writing, you can see the way people are writing, the way they are responding, I know, even online ... So if you ask Robert or Meena or Humphrey to post something, anonymously, I could tell you who posted it”
(Participant 3)

Meanwhile, an exploration of the choice of words used to describe members of the Learning Set itself also offers some interesting insights into group identity. This is summarised in Table 6.6 below:

Word used to describe other participants	Number of participants using this description
The others / other students	8
Group-members	7
Other people	4
Group-mates	1
Team-mates	1
My fellow learners	1
My colleagues	1
My fellow tutees	1
Fellow students	1
Discussion board members	1

Table 6.6: Terms used by student interviewees to describe members of the Learning Set

Thus, it can be seen that opinion was very much divided, with some students using very familiar terms, such as '**team-mates**' and '**my fellow tutees**', indicating a strong feeling of group identity and involvement, whilst others referred more formally and remotely to '**the others**' or even simply '**other people**', indicating a far less well-developed sense of group identity or even membership of the group at all. This resonates most strongly with the findings from the Social Network Analysis of the actual online discussion board from the course [Section 5.6], which indicated that there were some students who were central to group interactions, whilst others (most especially, although not exclusively from Learning Set C) remained very firmly on the periphery, some having no contact with fellow students within the online discussions. Indeed, this led one student to comment:-

"I think some other groups were a lot more cohesive than we were ... I think our group was a bit dysfunctional actually!"
(Participant 18)

6.7c Basic Theme: Face-to-Face Meeting & Building Rapport

Some students attributed the group identity to having met each other in a **face-to-face meeting** at the start of the course, prior to working together online, which they felt facilitated **building rapport**. This therefore became a further Basic Theme, which can be illustrated by the following responses:-

"Its really useful to have a bit of face-to-face [contact], because you've got to know who you're talking to and who you're dealing with, haven't you - their personality and everything ... Its good to meet them really before you start going online, otherwise you might be a bit timid about it"
(Participant 16)

"And when we had the face to face ... I felt in a way a bit more comfortable, and I felt a little bit more easy to agree or disagree, or say 'that was interesting Jack', or 'that was interesting Jill'"
(Participant 13)

"I think the face-to-face sessions were real and it actually made the group members get to know each other. I think it was quite easy afterwards to develop a rapport on the discussion board ... I can't imagine doing a course without having any face-to-face sessions, because I think seeing the people gave me an idea about their background, and therefore when we contacted in the discussion board it wasn't such a very strange experience as I expected"
(Participant 30)

The comments in this theme are also an interesting reminder that although we ourselves saw the course as predominantly an online distance learning course, and indeed, the extent of supporting face-to-face contact is seldom discussed in the wider academic literature when considering online discussion [see Chapter 2], nevertheless there was some small 'blend' of face-to-face

contact designed into this programme, which appears to have impacted very positively on the students' overall learning experience.

6.7d Basic Theme: Peer Facilitation

A further theme to emerge was that of '**peer facilitation**', which is another potential influence on the extent to which students may have felt comfortable contributing to the online discussion activities. It should be noted that 'peer facilitators' is a phrase used to denote students who take an active facilitation role within the online discussion, rather than leaving this role exclusively to the tutor. The significance and impact of peer facilitators has been discussed elsewhere (Sherratt & Sackville, 2006a; Sherratt, 2009a), and this has also been substantially explored earlier, in Chapter 5. Comments relating to the presence of peer facilitators can be summarised thus:-

“within our little tutorial group there was myself, Jane and Martin who decided we were going to take an active role in deliberately replying to anybody who came on. We'd deliberately go out and try to reply to their posts, to try and get the discussion board going – which I think was relatively successful” (Participant 10)

“I was asking questions at the end of my posting to elicit some kind of response” (Participant 29)

“If someone posed a question to me, directly, ‘Jane, what do you think about this?’ I would respond. ... Somebody asked me a question, ‘oh I’m interested what you said about that, Jane, tell me more’, so then you think, oh, well I better had!” (Participant 15)

“I did try to respond to as many different people as I could, just to encourage them, specially if it was somebody who hadn’t had a lot of input, or hadn’t had a response to, then I tried to top it up to give them a bit of encouragement, as much as anything, just to keep the discussion going” (Participant 16)

“I would read it and it was literally an instinct I just had about it. Some of it was a desire to start some kind of discussion, and some of it was literally, ‘you have made a really good point there and let me acknowledge that’” (Participant 29)

A small number of students seemed to be annoyed by these peer facilitators, as shown by the following comment:-

“In our Learning Set, I think we had quite a nice range of people, but the whole thing was very much Jack-started and Jack-centred - you know, on the occasions we met him, he always said that he really enjoyed group-work, but I felt he actually liked to lead groups, not be part of a group” (Participant 11)

A possible explanation for this view could be that this individual felt that the authority of the facilitator role should instead have been reserved for the designated tutor, rather than being seemingly usurped by a fellow learner.

However, for other students, the presence of peer facilitators was encouraging – possibly allowing for 'Legitimate Peripheral Participation' (Lave & Wenger, 1991) in a Community of Practice, or alternatively, supporting the notion of students contributing to 'Teaching Presence' (Garrison et al, 2000; Anderson et al, 2001) within a Community of Inquiry. These positive views can be typified thus:-

“I think there were two main people in our Group who led the group really, around discussions, so I felt more comfortable maybe tapping into their conversations, when I’d seen something relevant that I could respond to”
(Participant 17)

“I think ours worked extremely well. I think it was the people. You got it right with our group. I think it helped having someone like Jack in the group, and he was relating to Jill, and she sat in the middle, and she sort of was with the dentists and was sort of with the nurses”
(Participant 13)

“Sometimes you anticipate that you will get something from certain people, so whenever you see their name on the screen you say ‘oh fine, I’ll get something here’.”
(Participant 9)

“a question in the blurb definitely stimulated discussion from other group members, certainly, because if it was ‘has anyone else had experience of this?’ and it was something people could very easily say ‘well yes, I’ve got experience of this’, and it often stimulated quite quick discussion as well, so I suppose then I became a bit more aware of that as a potential tool, so I maybe started to use it a bit more”
(Participant 15)

“As for the contribution on the Discussion Board, you don’t necessarily need the tutor to take over the discussion, not in this sort of course, anyway”
(Participant 16)

6.7e Basic Theme: Notice Board

A further Basic Theme to emerge related to how the online discussion board is used in practice, and the extent to which it became more of a '**notice board**' rather than always supporting discussion. These views are not universally held, but seem to reflect opinions of a sizeable proportion of the student body, for example:-

“I don’t think it should be called a Discussion Board, because the word ‘discussion’ makes you feel you should be discussing something”
(Participant 1)

“it is not a discussion, it is more like a notice board, rather than a discussion board.”
(Participant 31)

“more often than not, it was more people putting in their own responses to the topic, rather than being a discussion.”
(Participant 11)

This latter comment indicates that the students were responding to the task and thus interacting with the course rather than with each other, according to Moore's (1989) classification. This resonates strongly with the analysis of the actual discussion board [presented in Section 5.3], which shows that a number of students made 'statements' rather than engaging in 'dialogue' according to the typology of Sackville and Sherratt (2006), and this also indicates a good level of insight on the part of these student interviewees. Interestingly, however, some students commented favourably on the potential value of reading about the experiences of other learners, despite also recognising that the online discussion board, as experienced during their course, was not living up to its full potential. These insights can be illustrated thus:-

“And although there wasn't much actual discussion, and a lot of people seemed to use it not so much as a discussion board but more of a 'bulletin board', nevertheless it was interesting and useful to see different experiences, especially from the non-medics, whose experience was often quite different.”
(Participant 4)

“I think, overall, the discussion board is an incredible tool for adult learning ... you call it a discussion board, but people still used it as a message board - they still used it as a 'this is what I think'.”
(Participant 19)

“I'd say its a 'comments board' rather than a 'discussion board' ... If at the beginning it said "this is a comment board, answer all your activities on here and you can leave comments for other students", then it would have been absolutely fine and it would have met all its objectives”
(Participant 3)

6.7f Basic Theme: Lack of interaction (Isolation & Frustration)

Following on from the above, another closely-related Basic Theme was the '**lack of interaction**' experienced on the online discussion board. This experience is typified by the following responses:-

“I felt there was a small group of people within it who were very active, and others who were just doing the minimum requirements. Now that doesn't mean they weren't personally getting a huge amount of benefit out of it, or out of the system, but I sometimes felt that I was losing out – they were gaining from us, I'm not sure that we were gaining anything from them”
(Participant 10)

“I don't think people necessarily took the Discussion Board seriously, and its such a good potential learning tool if you start from the beginning and say this is what you're going to learn from it”
(Participant 18)

“I wasn’t really participating in the discussion in that sense, I was doing what I had to do ... I think I would have enjoyed it more if I had become active in it!”

(Participant 25)

“I think the reason I didn’t reply to other members of the group because they didn’t often ask me a question ... if any of them had asked me questions, I would have replied”

(Participant 13)

Some students found this lack of interaction somewhat dispiriting, and reported that this led to feelings of **frustration** and even **isolation**, with comments such as:-

“I found that I was constantly checking for replies and not getting them”

(Participant 3)

“the frustration with some group members with the discussion [board], as they would post not a lot, they would just post what they thought as a monologue and then move onto the next task”

(Participant 31)

“People didn’t often respond to what I said; equally, people I don’t think responded a lot to what the other people said ... it tended to be a small number of people who used it, and the asynchronousness was a bit stilted - a bit like letter-writing”

(Participant 28)

6.7g Basic Theme: Time & Timing of Postings

Comments on the asynchronous nature of the discussion board led to the emergence of a Basic Theme focused on the '**timing of postings**', and the passage of **time** between responses. This was held to be problematic, and one of the causes of the lack of interaction noted in the previous theme [Section 6.7f]. This resonates with the findings of Hewitt (2003, 2005), that time is an adverse influence of the development of discussion threads. Typical student comments are as follows:-

“The 3-week [time] envelope allowed for asynchronous working, but that also did not lead to discussion, which involves more immediacy - for example, I say something, and you reply straight away and we have a conversation”

(Participant 4)

“I never felt we got a lot of discussion, in so much as you would in a one-to-one situation, where I fly on with ideas and you explore ideas, because of the time-scale involved - each one is on for a couple of weeks, and with it being asynchronous, you might only view it 2 or 3 times during that period, so there wasn’t the time to develop an idea. So you were able to see what other people had written and learn from their experiences, and pick things out (that was good) and make comments about them, but you didn’t get more beyond about 2 comments down a line of a discussion, and then you had to start on the next one”

(Participant 28)

“when you are on question 9 or that’s where you should be, and someone is answering question 2, to be honest, sometimes I didn’t bother reading it, because I’d done it several weeks ago. It was irrelevant - and I know irrelevant is a strong word - but to me, it was irrelevant and I wasn’t interested, because I was up to a different question ... I couldn’t care less, because I had moved on to something else” (Participant 29)

On the other hand, when other students replied to each others' postings fairly swiftly, this was held to positively support the development of discussion, thus further supporting Hewitt's (2003, 2005) stance noted above, for example:-

“I think it worked best when there was a core group of people who were able to commit to it at roughly the same time as one another, I suppose. I found that I engaged much less with what people said if it was six weeks after I had thought about that Activity, whereas if it was a week after or whatever, then it was still in my mind, I think, so it was more useful” (Participant 15)

6.7h Basic Theme: Length of Postings

A further, related aspect of discussion threads to emerge as a Basic Theme was the actual **'length of postings'** made by individual participants, and there was fairly good agreement across the student population on this point. Overall, it was felt that very lengthy postings were off-putting, possibly because they contained too much information or took too long to reflect upon, and thus they were generally held to be less useful than shorter messages. For example, a number of students commented:-

“The people that posted a lot of the information, I'd have to have time to read it, so I would read others first” (Participant 13)

“I found that after reading a paragraph or two, you want to stop, because the amount of information was too much, on top of what you were doing” (Participant 9)

“Over time, I realised certain long postings from one individual did not have much material in it, but despite this, I would read this for the sake of it - but I have to say that it was quite boring! I found a short but apt reply more interesting than a very long response” (Participant 30)

“They obviously put a lot of effort into their long discussion [postings], and there were a couple in the early days that were practically an essay in themselves! I prefer them a bit shorter and a bit easier to digest, and then to move onto the next point” (Participant 16)

6.7i Basic Theme: Professional Groups

Meanwhile, an interesting additional Basic Theme to emerge related to the '**professional groups**' from which students came. Some students felt that the multi-professional nature of the course cohort was beneficial and enhanced their learning experience, for example:-

“if you’re a doctor or whatever, you know pretty much what happens in your field, and ok, paediatrics might be a bit different from surgery, but broadly they are fairly similar – compared to say GP or nursing or ambulance workers, where things are very different, and that was interesting to hear such a range of perspectives, and then I suppose that immediately made me think 'oh!' And you had a question, because you didn’t know so much about it”
(Participant 15)

“one of the reasons I chose the course was because we had collaboration with different professionals and it would have been interesting to put something in from my perspective and maybe the doctor or dentist saying ‘well what do you mean by that?’”
(Participant 18)

However, it was also apparent that some students found the presence of other professions within the course intimidating or simply irrelevant, choosing instead to interact with people from a similar professional background as themselves. Typical comments representing these views are as follows:-

“I feel as if I learnt a great deal from the group, but it was professionally-situated, so the doctors all stuck together and said 'I agree with you' and related to one and other, and I think the nurses stuck together”
(Participant 13)

“I think that because I was with medics as well, I felt a little bit nervous, personally, whether I was up to the types of conversation they were having ... I don’t know whether we tended to feel more confident with our other colleagues in our own professions”
(Participant 17)

“these people weren’t my friends, these were people who were strangers and you’ve got a professional relationship straight away. And because you don’t know them, it makes it much more difficult to know how best to communicate with them”
(Participant 1)

“I suppose I developed a rapport with the people that I was in contact with anyway. It tended to be other doctors, because we had a similar experience”
(Participant 19)

6.7j Basic Theme: Development

A further Basic Theme within the Organising Theme of student interaction was that of the '**development**' that arose as participants settled into the experience and practice of e-learning

during the year-long programme. This is especially interesting when compared to the analysis of the course discussion board [presented in Section 5.2a], which showed a distinct rise in both the quantity of postings, and also in the level of Dialogue achieved [Section 5.3a] in all four Learning Sets, since it indicates students' awareness of their own development of interactive participation. As also noted in Chapter 5, this again resonates with Arbaugh's (2004) suggestion that students need to take at least two online courses (*ie* modules of a programme) before they feel fully comfortable as an online learner. These views can be typified by the following comments:-

“the first Module was just experimental for me ... By the time I got to Module 2, I'd looked into it a lot more, I'd kind of understood more about what I should be doing or what I should be getting out of it”
(Participant 1)

“When you do it the first time around on the certificate course, you can't really understand it, because you don't have the same kind of understanding of e-learning that we have built up over the first 12 months ... so I think your attitude towards it changes over time”
(Participant 7)

“I felt in the first module, there was interaction but you got it quite late on, if you actually go back and look, the people who were active at the beginning, remained active, but the people who hadn't been active suddenly tuned in”
(Participant 24)

“from the middle of the second module, it kind of became like an internet chat. When I see a response, I felt an itching to give a response, to say what I think or what I feel, or what I felt as a student when I had a similar experience ... so yes it started to evolve in the middle of second module, more like chatting rather than formal posting messages in there”
(Participant 31)

6.8 Organising Theme 2.2: Students' Experience of Change During the Course

A second Organising Theme related not to the interaction between students, but the **changes that individual students experienced during the year-long course**. The three Basic Themes to emerge within this section are therefore focused on each individual person, rather than on the group as a whole.

6.8a Basic Theme: Confidence

The first Basic Theme to emerge related to the change and improvement in levels of '**confidence**' felt by some students. This may explain, at least in part, the improvement in

interaction on the discussion board during the year, as discussed under the previous theme [Section 6.7j]. Illustrative responses here include:-

“Initially, I felt lacking in confidence in my capability, and I felt a little bit lacking in confidence in what I was going to say. ... I think as I was reading what they were posting, recognising my ability as a poster, then I felt more confident. ... As the year went on, I felt more comfortable in my ability” (Participant 13)

“I felt a little bit nervous, personally ... but that’s about me, really, I think, confidence-wise. But I think as the programme progressed, I realised people had the same anxieties as me as well, it doesn’t matter what profession they were from - especially around assignments and things like that” (Participant 17)

“my feeling is, we got used to the online board. The first module, I was quite nervous that I should finish the tasks, in terms of the deadline and preparing assignments. In the second module I was a bit more relaxed and thought ‘well I got the first one, I can do this’ so a bit more confidence. And I got used to the people ... and then it became more easy, and more interesting as well” (Participant 31)

“going back to the first module, in the first few weeks or so, I was still a bit hesitant, for no reason whatsoever, but maybe just ‘what would people think if I said this or write this?’ I think it was, ‘I’ll see what people think first’, and I think that’s all it was” (Participant 12)

6.8b Basic Theme: Learning

A further Basic Theme that identified the change in individual participants was that of the **‘learning’** that they reported during the year. This can be illustrated by the following comments:-

“its certainly made a difference to me, and even as the course was progressing I was making changes in what I do, so I would do it again tomorrow. I really enjoyed the course” (Participant 18)

“immediately I started the course I was applying that learning to my work” (Participant 1)

“I learned a lot about my own abilities that I didn’t realise I had” (Participant 3)

“I felt I knew the practical side of teaching, but I had no idea about the theory, and that’s been a great experience. I knew what to read, thanks to the course. You could go around the world forever picking up bits here and there, but this did focus me, and covered the theory-practice gap” (Participant 14)

Some students even made the point that they were drawing on their learning in order to discuss the course during the research interview. For example:-

“see, I can quote constructivism now, which I didn’t even know what it was!”
(Participant 13)

“Well I’m saying some of these points because of what I learnt. I don’t know if I’d have been able to talk in this way without the education of the course!” (Participant 16)

6.8c Basic Theme: Withdrawal

A final Basic Theme to emerge relating to the changes experienced by individual participants during the year was that of '**withdrawal**'. Some students noticed that the level of engagement in online discussion at the end of each module was much lower, as even the active discussants chose instead to focus on their own personal learning and production of assignments. This, then, appears to be a potentially significant insight that can greatly assist tutors in planning their interventions, and in setting their expectations for engagement in discussion activities. This insight is supported, at least in part, by the recent work of Abedin and colleagues (2014) who have proposed that the timing of assignments is a possible reason why non-task social postings happen more in the early days of a course than at the end. From my analysis [discussed further in Chapter 8], it would appear that this holds not just for social interaction, but for all types of postings. Meanwhile, the students' experience is explained thus:-

“When we were writing our module essays, there wasn’t much going on with the Discussion Board, just a token gesture”
(Participant 18)

“we have to do the activities, but because they were not helping with the work for the assignment, I think people have realised that they might as well just put the extra work towards the assignment, because that’s the main objective really” (Participant 9)

“would we risk putting other peoples work in essays if we spoke about it, because if you start talking about it you say well I’m going down this route, and I say I’m thinking about doing this, and you think ah, that’s a good idea, and you stand the risk of crossing over then ... We all know now that the work we put in was our own, and nobody can say otherwise”
(Participant 3)

6.9 Global Theme 3: Tutor Engagement

A third over-arching theme arising out of the interviews and questionnaires was that of '**tutor engagement**', and this thematic network is presented graphically in Figure 6.3, overleaf. The 12 Basic Themes which emerged from this thematic analysis indicate that the concept of tutor '*presence*' was acknowledged to be of great importance by students. Interestingly, detailed analysis has also suggested that different individuals perceive both the nature and practice of

'*facilitation*' differently. It is also suggested that different individuals perceive different levels and frequency of tutor intervention as desirable, a point which resonates strongly with the findings of Mazzolini and Maddison (2003a, 2007); and which will therefore be explored further under the individual emerging themes of this network.

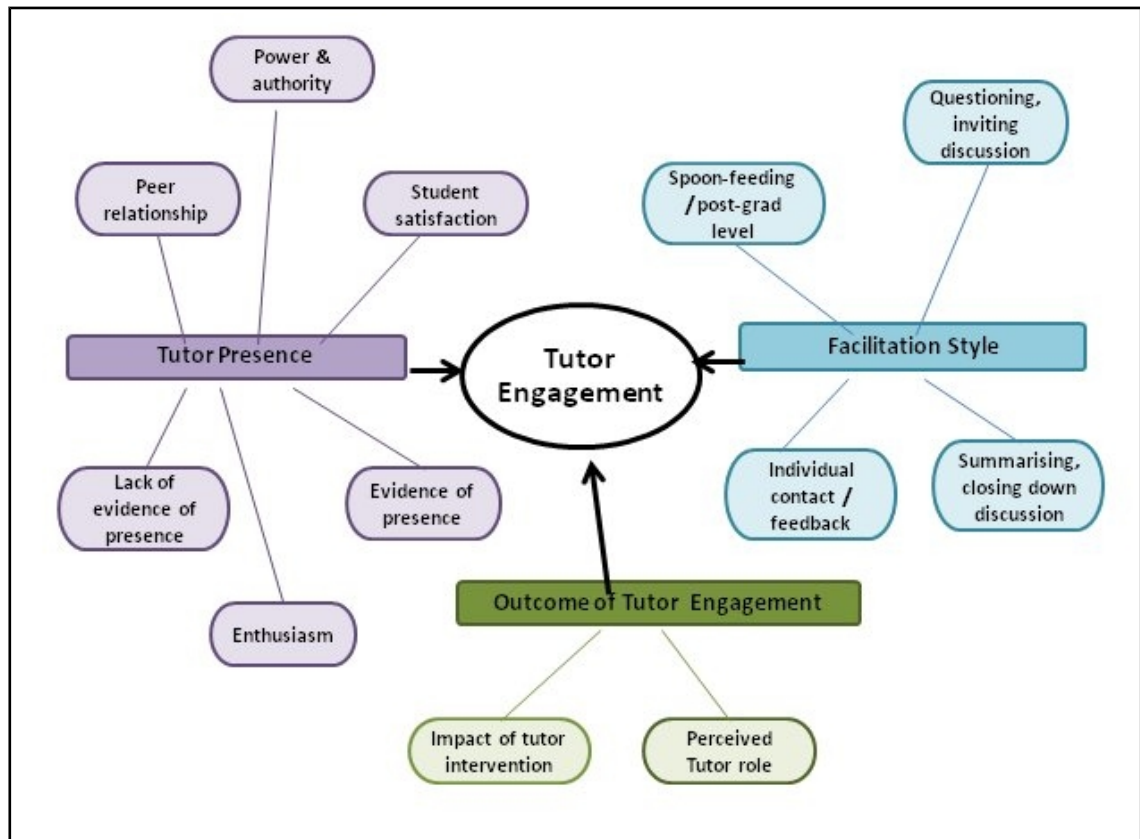


Figure 6. 3: Thematic Network 3, Global Theme: Tutor Engagement

6.10 Organising Theme 3.1: Tutor Presence

The Organising Theme '**tutor presence**' is a major element of Thematic Network 3. It reflects the basic assumptions of the Community of Inquiry model (Garrison et al, 2000), as well as resonating strongly with the notion of 'visibility' on the part of the tutor, proposed by Savery (2005) [discussed in Sections 2.2 and 2.5b]. Furthermore, this theme reflects the importance that students attached to tutor interventions and accessibility. Therefore, this Organising Theme has given rise to six Basic Themes, the first two of which reflect the students' views of what might, or might not constitute acceptable evidence of 'presence', followed by a consideration of the results of tutor presence and how it was experienced by the students.

6.10a Basic Theme: Lack of Evidence of Presence

In recognising the importance of 'presence', it is particularly interesting that some participants were of the opinion that some tutors did not even read all of the Discussion Board postings, simply because those tutors did not post frequent messages themselves, for example:-

"I'm not actually convinced the tutor looked in the first module ... I can't remember there being a single line from them or a single email from them, ever, in any shape or form".
(Participant 24)

"I didn't really know with [Tutor] if he was reading them or not ... because it doesn't tell you who has been on and when they have been on does it? The only time that you know somebody has been on is when they left a posting or sent you a message"
(Participant 29)

"If they respond specifically to comments made, you feel they are involved. Otherwise, you are unsure if they are around."
(Participant 6)

"I presumed they [Tutors] were reading, but without any comments, or complete silence for 2 months, you have to presume that they are reading it, but I can't be absolutely sure"
(Participant 31)

"You knew the tutor was there in face to face work, you were never sure when they were logged in or what they thought when on line ... it made me feel very paranoid, like having a conversation with some one who won't speak, you're not sure what they are thinking, if anything!"
(Participant 32)

Interestingly, these comments also bear out the insight of Blignaut and Trollip (2003b), discussed in Section 2.5a, that silence in the online context equates to invisibility. This, then, has some potential significance for the way in which an online tutor might carry out her role, and will be further explored in Chapter 8.

6.10b Basic Theme: Evidence of Presence

On the other hand, students also cited what they felt constituted clear '**evidence of presence**' on the part of their tutors. This was a strong emerging idea, and so this became a separate Basic Theme in its own right. This view is typified thus:-

"I think if a tutor picked on a topic in one of the contributions and made some suggestions, then this tells you, yes, she is reading your contributions"
(Participant 9)

“the majority of the time, whenever [Tutors] posted something they would use the names of the people. They would always say 'its interesting to read Hannah's posting, and Humphrey and Meena disagreed and Robert agreed' ... That was nice. Its good then because you know they'd read everything that we wrote” (Participant 3)

“I assumed they were [reading], but you got quite more evidence when they commented – it was more tangible ... its nice to feel that there was evidence of it being considered, and watched, - as I said, I'm confident these people do it, but evidence was, I found, helpful - it was confirmatory” (Participant 28)

“The last module we did - where [Tutor] put a lot more in than either of the tutors from previous two modules, that was quite interesting ... [Tutor] put a few bits in, but I think it was more obvious to me that [Tutor] was reading all our postings, and every now and again sort of drop something in to kind of make a point.” (Participant 11)

Students also commented on the reassurance that they felt when this evidence of tutor presence was apparent, For example:-

“[Tutor posting] is nice because A) you can actually see that they are reading what you have put down and B) it makes you think about other things ... It makes you realise that they are actually looking” (Participant 14)

“Maybe that's what was so reassuring when tutors did respond, it reinforces the fact that they have read it” (Participant 15)

“there are other comments from the tutors, which made you feel, 'Oh I think somebody is reading this' ... you felt, oh somebody was taking an interest, taking part in the discussion, it felt different in that sense, that you felt there was somebody else” (Participant 12)

6.10c Basic Theme: Student Satisfaction

As noted above, the interviews and questionnaires explored the students' reactions to their learning experience in each module. Thus, an aspect of the global theme 'tutor engagement' was the students' responses to tutors' interventions, especially in terms of their overall satisfaction with levels and types of tutor intervention. It appears that a substantial number of participants felt a much greater level of satisfaction with those modules where there was greater tutor input in their Learning Set Discussion Board, for example:-

“I enjoyed the last module the best - and it might have been the more interaction, because not only did [Tutor] interact more with me, [Tutor] interacted more with everybody” (Participant 13)

"I think I liked it when the tutors did make a contribution, yes I think I probably read it once or twice more than the other people's ... and why do I like it? because it's contribution and it shows a commitment"
(Participant 23)

"It was nice to see [Tutor] took the time to say "thanks for your post, have you thought about this?" It made me motivated then to log on and do more posting"
(Participant 29)

Furthermore, this also seems to bear out Shea's (2006:41) proposition that *"perceived teaching presence is associated with students' sense of learning community"*, which is illustrated by the following comment:-

"We did have three very different approaches [from tutors], and when I compare two of them, I think the one where the tutor had a little bit more input, the group responded very well, and the discussions that ensued seemed to be much richer and much more thoughtful, and more people were inputting to them"
(Participant 15)

6.10d Basic Theme: Enthusiasm

As discussed earlier [Section 2.5a], Mazzolini and Maddison (2003a) noted that students considered tutors who posted frequently to be more enthusiastic, a finding which is also borne out by comments from students in this study. The Basic Theme '**enthusiasm**' can be illustrated by the following comments:-

"Some tutors were clearly very active and very enthusiastic; others were quieter and appeared to be just doing their jobs"
(Participant 4)

"Not only did [Tutor] interact more with me, [Tutor] interacted more with everybody, and it was as if [Tutor] was taking – and I know this is not the case, but it was as if [Tutor] was taking a greater interest – it just appeared that way. I know it probably isn't that [Tutor] was more interested than the other two people, but it just appeared that way, because the interaction was greater"
(Participant 13)

"[Tutor] was the one who was most involved in the Discussion Board and tried to lead us through the discussion a bit more and that was a very refreshing change from what had gone before, very much so! It was obvious, [her] enthusiasm for the course came across amazingly well"
(Participant 16)

Clearly, this view has implications for future tutor practice, since in addition to indicating their approval and appreciation of tutors who intervene regularly in online discussions, these learners seem also to show themselves to be somewhat dependent in their expectation of tutors. And this may, in turn, be a source of concern for those tutors who concur with the views of authors such as Dixson and colleagues (2006) and Maurino and colleagues (2007), that tutor intervention

inhibits active learning on the part of the students. This, then, links to the next Basic Theme which considers further the authority role of the tutor.

6.10e Basic Theme: Power and Authority

The issue of '**power and authority**' arose frequently during a number of interviews, and can thus be classified as a strong Basic Theme, although opinion was somewhat divided regarding the extent to which the power and authority of tutors was apparent. Some students felt conscious of the authority of the tutor, commenting thus:-

“It felt a little bit like Big Brother, I think, sometimes” (Participant 17)

“I felt the omnipresence of the tutor being “behind” the discussion board was off putting, yet they were very understanding and approachable in the skin”
(Participant 32)

“a bit Big-Brother-ish, because if you were at a college, and you’re just having a chat within yourselves, you’ll sit and chat in a room or in the bar or wherever, and you can say whatever you want, and discuss things that perhaps you might not if there was a tutor present. So I think it’s a kind of double-edged sword” (Participant 11)

Some participants specifically commented on the influence that tutor presence had on them as students, which indicates a high level of authority attributed to their tutors. For example:-

“if tutors were more present, or if participants were more conscious that monitoring was going on, then this might stimulate me to make more postings on the discussion board, because I’d be aware that tutors were involved” (Participant 4)

“I feel sometimes when I was late in responding, if the tutor was in, I would feel well people are looking at it, you’d better get your work done and get your posting in as well ... My personal opinion is if a tutor is posting and I don’t post this week, I am letting them down, so on Saturday morning I need to be sitting down and do the reading and get a posting in by lunchtime, so I don’t feel guilty. So that’s how I felt, a little bit of watching on me, I needed it. You should take responsibility for your learning, but I think that little bit extra helped as well” (Participant 31)

“I think, its when you see the leader has hands on and he or she is trying her best to stir you up or stimulate the students, I think the students, even if they are tired, busy, no time, whatever, will have to at least respond to that” (Participant 9)

For other students, this same high level of authority was explained as a reason why tutors might not always maintain a strong presence within the online discussions, a view which can be illustrated thus:-

“I certainly didn’t get the feeling that they [Tutors] were involved with the discussion, and in some ways I can understand why they wouldn’t, because its a bit like the way you would drive if you see a police car, you know, this symbol of authority is there and all of a sudden you drive differently”
(Participant 19)

“I’m sure he was on [the discussion board], but he was like a ghost, he wanted his presence to be kept back, and that was good in a way ... I can imagine people thinking twice before they post, if they know the tutor is there”
(Participant 29)

However, other students clearly felt that there was less power and authority being exercised by the tutor, possibly moving more towards a peer relationship. This resonates with the views expressed by Rovai (2004) [discussed in Section 2.5b] that the tutor role changes from a traditional lecturer towards a more collaborative peer interaction in the online learning environment. Students commented thus:-

“[Tutor] put in I think more posts, but would move people along and always end with a question, which is a different form of movement than [other Tutor] I think. I like it, because I’ve copied it. ... The questioning sort of implies that you kind of have an idea where people are going, but you’re still expecting people to be doing their own work. So it brings the power gap down a bit ... actually, what you’re trying to do is work as peers to say you have that expertise, and you’re happy to share it with me and that’s great! But its still kind of respectful to actually let people go off and make their own decisions about it”
(Participant 10)

“My sense is that it was deliberately light touch, as distinct from people being too busy not to ... I would say there may be times when you can stimulate or direct ... I thought the tutors would be much more part of driving the questioning, and set interventions at certain times. I suppose they were more participant-led as opposed to tutor-led, and the facilitation was light touch”
(Participant 7)

6.10f Basic Theme: Peer Relationship

Another Basic Theme classified within Tutor Presence is that of the **peer relationship** that the tutors had with students. This was a recurring theme, that appeared to be considered a favourable condition for an adult-learning programme, by a number of informants. Illustrative comments are as follows:

“I think the tutors need to be dabbling, but it shouldn’t be their responsibility to be leading us ... I suppose I thought well, if we’re all at this level, then surely we’re all motivated enough to be doing it ourselves, and we’re not children any more”
(Participant 18)

“Setting the right questions and challenges, for this sort of thing it is the most important thing, ... and recognising if anybody is struggling; and probably then just joining in as one of the group, very democratic”
(Participant 7)

CHAPTER 6: INTERVIEW DATA - STUDENTS

“I suspected that they would either be observational, or as an equal within the discussion, because it’s a grown-up group, to be honest, it’s a postgraduate thing ... Did I respond to tutors postings? Its interesting, because I think I did, but you’d respond entirely on their merits and not because they’re a tutor. You know, there’d be nothing special about the tutor’s posting”
(Participant 10)

These responses resonate with the findings of Parsell & Duke-Yonge (2007) and McWilliam (2008) [discussed in Section 2.5b], of the beneficial effect of tutors joining in discussion with their students, even at the expense of their position of authority. However, this relationship of equals between tutors and students was not seen as a good thing by all respondents, with some participants clearly expecting tutors to be more 'in charge', as also noted by Bergström (2010). This attitude is illustrated by the following comment:-

“In the 3rd module it felt as though the facilitator was part of the group rather than actually the facilitator”
(Participant 24)

In considering these differing responses to the peer relationship, it is also interesting to note the variety of language used by participants when referring to tutors, since this gives a further indication of the extent to which tutors are seen as peers or located in a more distinct and authoritative hierarchy. For example, although 23 of the 24 respondents used the word '**tutor**' [the word used by the Programme Team to describe themselves], one participant chose instead to refer to them constantly and consistently throughout the interview as '**teachers**', which has a greater feel of authority attached to it. On the other hand, three participants referred to tutors during the interview as '**you guys**', which is a highly informal way of identifying a difference in role, but without inferring any associated hierarchy or authority. The full list of terms used by participants to refer to tutors is presented in Table 6.7:-

Word used to describe tutors	Number of participants using this description
Tutors	23
Facilitator	3
You guys	3
Teachers	2
Moderator	2
Mentor	1
Team Leader	1
The leader	1
Academic Tutors	1
Personal Tutor	1

Table 6 7: Terms used by student interviewees to describe tutors

From this list, it can be inferred that there was something of a lack of homogeneity in the way that students viewed tutors in relation to themselves. Thus, although the peer relationship was a moderately strong emerging theme, it was by no means universal.

6.11 Organising Theme 3.2: Facilitation Style

A second Organising Theme that arose when considering tutor engagement was the differing '**facilitation style**' adopted by different tutors. The impact of these differing approaches was commented upon by students, who variously identified a positive effect on supporting the development of discussion, or alternatively a negative effect in inhibiting the achievement of dialogue. This Organising Theme comprises four Basic Themes, which encompass these different views.

6.11a Basic Theme: Questioning, Inviting Discussion

The first, and major Basic Theme to emerge was identified as **inviting discussion**, and this largely arose out of a '**questioning**' style of tutor intervention.

“The comments that were put on by the tutor were more of a question. They tended to ask you to go further, explore the idea, so I suppose they helped the discussion along really”
(Participant 16)

“she’s not necessarily telling us what to write, she’s just saying ‘that’s a good point, and it happened to me too – what do you think about that?’.”
(Participant 18)

“questions from the tutor were more likely to generate a lot – they were likely to generate several people coming in, on that new question ... I think as a group, we responded positively to tutor involvement”
(Participant 15)

“In the first module, [Tutor] was very active, very good. She would interact with us and put postings up. ... [Tutor] would say ‘have you considered?’ or ‘have you explored this possibility?’ and it opened up a great number of gates for people ... and I would think ‘that’s good I’ll explore that, I will have a think about it’ ... it left you asking yourself questions”
(Participant 3)

6.11b Basic Theme: Summarising, Closing Down Discussion

On the other hand, it was noticeable that other tutors adopted a different style of intervention, taking a '**summarising**' approach, which some students complained **closed down discussion**,

and contributed to the death of a thread. This experience can be illustrated by the following comments:-

“What didn’t feel right to me is where there’s lots and lots of discussion amongst the candidates, and then at the end the tutor comes in and says ‘well thanks for your discussion, and in fact you were right, you were wrong, the actual answer is this’.”

(Participant 10)

“it was more of a ‘but have you thought about this’ approach, rather than ‘what do you think about this?’ ... it didn’t really say respond, so I didn’t respond to it”

(Participant 29)

“That particular tutor said things or phrased things in such a way that it perhaps just didn’t really encourage conversation as well as it might. ... Rather than using a question, it was finishing off, it was a full-stop, the end ... so it felt like that person had had the final word, and therefore in that situation, we all kind of stopped”

(Participant 15)

6.11c Basic Theme: Postgraduate Level / Spoon-feeding

A third Basic Theme arising out of consideration of tutor practice was the '**postgraduate level**' of the course, and the extent to which students might therefore expect to be self-directed rather than relying on frequent intervention or '**spoon-feeding**' from tutors. This was a major theme, commented upon by a sizeable proportion of the student cohort. These views can be typified thus:-

“I expected more input from the tutors, but then the other side of the coin says well this is now towards Masters, postgrad level, and you shouldn’t really have a tutor holding your hand”

(Participant 18)

“you accept that with e-learning you can't have huge amounts of tutor time, do you know what I mean? There is no spoon-feeding. There is a bit of helping and guiding, but you can't force them or be dependent”

(Participant 7)

“what we expected on starting the online discussion board, the tutors would say ‘this is right, this is wrong, and this is the process’ - probably a bit more spoon-feeding or a little bit more expectations from the tutors to come into the discussion board for every task and tell you what the people are discussing is ok”

(Participant 31)

“I thought that the tutors would be more ‘present’ - not that they should spoon-feed learners at this level, who should be adult learners and take responsibility for themselves”

(Participant 4)

6.11d Basic Theme: Tutor Feedback/ Individual Interaction

An additional Basic Theme to emerge was the way that tutors also engaged in the course outside of the discussion board, by giving 'feedback' on an **individual** basis.

“for example, during assessment time, you can ask the tutors what to do and you get advice and comments which were helpful ... and the feedback was helpful, when they said you could have done it this way or that way”
(Participant 12)

“I felt very very comfortable with [Tutor], I had a good rapport with her. I think we sort of had a similar writing style and in response to a question, I got good feedback. She would be negative where she needed to be negative, but it was good, as in it was useful feedback. I got very useful feedback from her in terms of assignments. I found that really good”
(Participant 3)

“I found that [Tutor's] feedback would make me think of other things ... it was more fruitful, in terms of feedback, than 'yes that's fine, good'. Do you know what I mean? I think its also that [Tutor] gave me options. It let me work it out, instead of 'it was all OK'. I mean, validation is fine, its useful, but it needs to be with something else”
(Participant 19)

The use of email to seek and receive tutor feedback on draft work was also commented on specifically, and favourably by a number of students, indicating that they had experienced good levels of support during the course. For example:-

“there was exchange with the tutors by email, which was very useful indeed. Being able to send a paragraph or two of a structure to the tutor via email, now that was useful! That was massively important in fact, especially in Module 2, where I started to wonder where I was going with it, and she pulled me nicely back on track”
(Participant 16)

“if I had a particular doubt I would tend to email [Tutor], and then I would get a series of thoughts back, which I found very useful. This rapport and the way that [Tutor] encouraged me in this course, made me move forward, to get more in depth in the course”
(Participant 31)

“I felt the support was good in E-mail because tutors could give a much quicker response than if one had to wait until a meeting. ie a class meeting every Wednesday would only get a tutor remark the following Wednesday, whereas on E-learning a response can be provided at the click of a mouse”
(Participant 32)

6.12 Organising Theme, 3.3: Outcome of Tutor Intervention

A third Organising Theme focused on the result of tutors' engagement, as compared to the process of engagement which formed the basis of the previous two organising themes. This

therefore comprised just two Basic Themes, focused on the impact that tutor intervention had, and associated closely to this, the students' perception of the tutor role.

6.12a Basic Theme: Impact of Tutor intervention

The first Basic Theme is focused on the '**impact of tutor intervention**'. Many students offered the opinion that tutor intervention was a positive thing, and further explained that they felt encouraged by it. This view can be illustrated by the following comments:-

"Its encouraging. You feel its the pat on the head, its like people are 'running the course' with you ... to say 'that's interesting, where did it come from'? Or 'have you read this paper?' Its great! It shows kindness and warmth and involvement"

(Participant 28)

"It helped me read a little bit more and helped me look for answers for what they [Tutors] have asked us to think about, so in that respect, when the tutors come in, it helped the quality of the discussion board"

(Participant 31)

"[Tutor] engaged a lot more in the discussion than [other Tutors], and I found that was better for me, because [Tutor] sort of drew things out of me, because she'd say 'yes, you've said that now, but what do you mean by this?' ... so [Tutor] would say to me 'oh I agree with what you've said, and that's very interesting, but what about X?' And I'd start posting. So it was encouraging me to post more than just the one posting that I had to do ... I felt as if the more interaction was better"

(Participant 13)

Some students felt that a lack of tutor intervention resulted in a lack of discussion from participants. This resonates with the view of Hewitt (2005:574), discussed in Section 2.5a, that a lack of active intervention can be interpreted as a 'lack of interest' on the part of the tutor, which then contributes towards the death of discussion. This view is typified thus:-

"I think the contributions were less, and rightly or wrongly, you get the feeling that if the tutor's not interested, why should I?"

(Participant 9)

However, it is also interesting to note that some students expressed the preference for not having a lot of tutor intervention, even suggesting that rather than encouraging dialogue, it may actually have had the opposite effect – a view which resonates with the proposition from Dixson and colleagues, that *"too much "shepherding" may inhibit learning"* (2006:24). Students who subscribed to this view commented thus:-

"in the 3rd module, I think I did everything that I should in the minimalist amount, but perhaps not as much in the third module as I had done in the first 2 modules ... I wonder if [more facilitator input] put some people off ... if you look at the third

module, I think that there was less interaction, but its very difficult because the facilitator may have been observing and thinking 'who is going to come on board? no-one is coming on board, so do they need more support?' so they came on board ... but I just wonder if that might have deterred some of the people who were bit slower from coming on board" (Participant 24)

"I think maybe if we'd had maybe a more 'visible' tutor at the beginning, I'd be interested to see if that would have turned things around a bit. Its very difficult, because you'd be at the stage where as a tutor you'd say you've got to do this and this and I expect it by this deadline, and that could put people off" (Participant 18)

6.12b Basic Theme: Perceived Role of Tutor

Thus, it has become apparent that students held widely differing views regarding the role of the course tutor. First of all, a sizeable number of participants expressed the expectation that the tutor should be active in online discussions, asking questions to galvanize some action and get the discussion going. This view is typified by the following comments:-

"I suppose to connect members of the group with the discussion, to ask them questions that lead them to discuss something with someone else, that is what I would say the tutor is" (Participant 19)

"I think it should work the way [Tutor] did it - it should work where she comes on and thinks 'its particularly quiet so I'll come on and throw a couple of questions into the mix and see what responses I get'. And if the topic goes off where it needs to be, then bring it back online again, just by reminding people what the topic of discussion is" (Participant 3)

"I think [Tutor] contributed a little bit more in the third module ... Well, I think it puts another perspective on things as well, really, so yes, I think the tutor should become more involved in the discussions" (Participant 17)

However, other students felt that a key aspect of the tutor's role should be mainly to monitor student participation and possibly to offer encouragement. This view is illustrated by the following comments:-

"I don't know how you pick this up ... people who might be a bit hesitant, and then to say 'ok John, that was the right thought', or 'Team, you're on the right track here', or 'have you considered X,Y & Z?' So I think the facilitator knows, but they are not there to give them the answers" (Participant 24)

"[Tutors should be] monitoring but playing an active discussion role so you don't feel paranoid that they are there but not participating, as that makes you feel you are being judged" (Participant 32)

On the other hand, and as also noted under the previous theme, a smaller number of students recognised that too much tutor intervention could potentially interfere with the process of self-directed and enquiry-based learning that they expected to be undertaking. This therefore tempered their view of the tutor role, for example:-

“But I can see both sides of the argument about how much input you should put in from the tutor. The tutor could lead the discussion too much and not let the natural flow of it go, and this particular style of learning would be affected by that then ... we’re kind of supposed to find it out for ourselves aren’t we, by our experiences and doing some reflection on what we’ve been discussing. And we wouldn’t need to bother if the tutor gave us all that, really, because we’d have all the answers pretty much straight away!”
(Participant 16)

Also as noted previously [Section 6.4g] some students did not recognise the value of the online discussion board, and so felt that the tutor's role was primarily one of individual feedback, support and guidance. In some cases, this view can be traced to the students' own earlier learning experiences – explained thus:-

“I kind of thought it would be probably quite similar to the Open University when I did that, where you’ve got distance learning and you’re allocated a tutor who you can contact by telephone or email or whatever, if you had any problems, and in a lot of respects it did run quite similar to that except we used email rather than actual phone calls, so in many respects it did work quite like the OU used to”
(Participant 11)

6.13 Global Theme 4: Need for Tutor Intervention

Meanwhile, a related fourth Global Theme of '**Need for tutor intervention**' was also identified from analysing the student interviews. Participants' expressed need for tutor intervention in the online discussion board can be classified into four distinct Basic Themes, two of which fall into the Organising Theme of '**actively seeking tutor intervention**', and two representing the opposing view, located within in the Organising Theme of '**not seeking active tutor intervention**'. This thematic network is shown in Figure 6.4, overleaf.

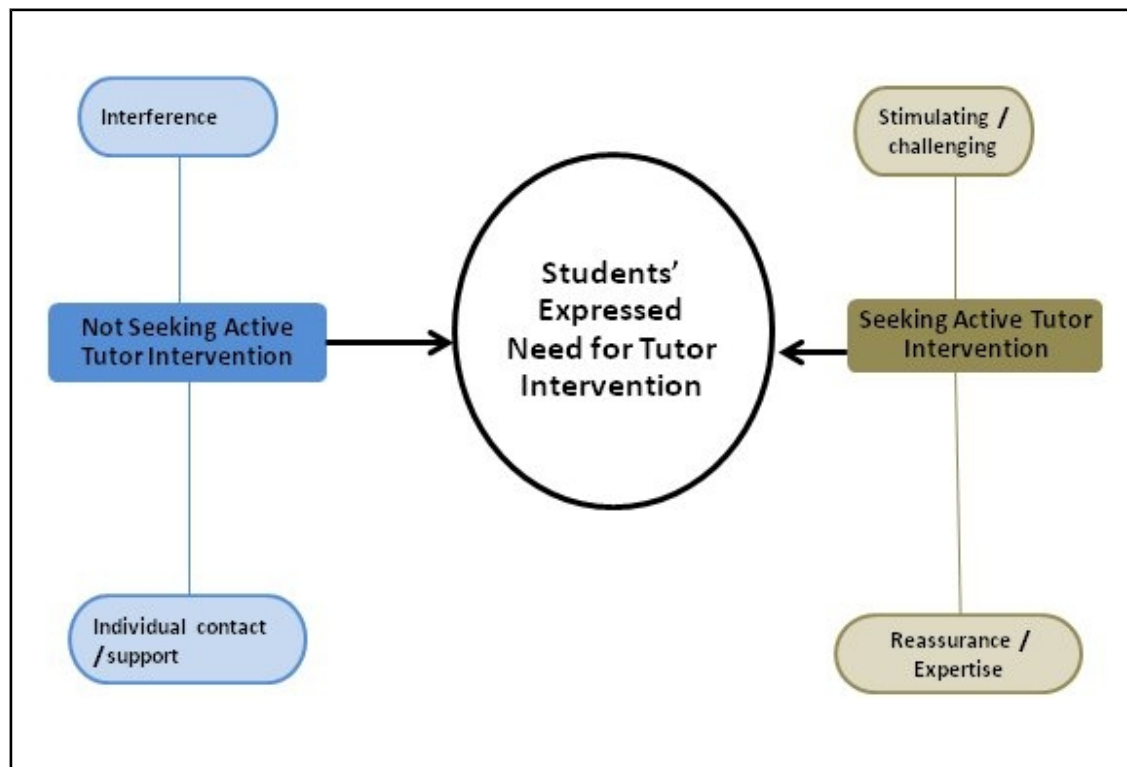


Figure 6.4: Thematic Network 4, Global Theme: Need for Tutor Intervention

6.14 Organising Theme 4.1: Seeking Active Tutor Intervention in Online Discussion

The first Organising Theme, '**Seeking active tutor intervention in online discussion**' is closely related to those in Thematic Network 3, discussed above [Sections 6.10 and 6.12]. It encompasses two Basic Themes, one focused on **stimulating** and **challenging** behaviours on the part of the tutor, whilst the other is focused on the **reassurance** and **expertise** that the tutor can offer.

6.14a Basic Theme: Stimulating/Challenging

As noted earlier, some students were clearly and unequivocally of the opinion that frequent tutor intervention is desirable, looking for **challenge and stimulation**, which emerged as a further Basic Theme within this thematic network. This view can be illustrated by the following representative comments:-

"We had 3 different tutors, and the last one was [Tutor] and she did sort of 'plant' things from time to time ... I'm not very good at critically appraising things, so

sometimes I need someone to just sort of tease it out a bit more, and say 'what do you mean by that?'" (Participant 18)

"I learn far more having my basic beliefs questioned than I do from just being told what the right answer is ... I think that the teacher should be the biggest stirrer around" (Participant 19)

"if you've got a very responsive group, that are clearly all very active, then to kind of push them and challenge them with a bit more" (Participant 15)

"when [Tutor] put things on, it was 'I agree with what Hannah has said, but have you considered XYZ option?', and I'd think 'no, I haven't', so I'd go away think about it, and when I had considered XYZ option, I'd come back and say 'I can see where you are coming from'." (Participant 3)

"It was as if [Tutor] was trying to stretch us in that module, by asking us questions ... I think [Tutor] was just dangling carrots, going 'what about this?'" (Participant 13)

Clearly, these students had a strong appreciation of the questions asked by tutors, to extend the debate, and they identified a positive impact in terms of deepening their learning and engagement with the course. This is in direct contrast with the next Basic Theme.

6.14b Basic Theme: Reassurance / Expertise

Other students also sought frequent tutor intervention, but for these students, the input of tutors seems more concerned with providing '**reassurance**' to the students and also imparting **expertise**, recognising the tutors' knowledge born out of experience. This view is typified thus:-

"You have more expertise, you have more knowledge in the field, you should be able to tell us 'well, you've thought about this, how about that?' so that would give another target too to raise us from where we are ... So I feel more tutor involvement will be helpful and will be encouraging to us" (Participant 31)

"[Tutors should] guide you through the course, not tell you what to do, but guide you and offer you support and advice; if you are off on the wrong track, put you back onto the right one; pass on their own knowledge about things" (Participant 25)

"[Tutors] are people that have the knowledge which we are gaining ... Sometimes you feel as though you're sort of wandering round a bit in the dark, and you want someone that just says 'you're going in the right direction' ... you felt reinforced, and it made you want to do more" (Participant 28)

"[the tutor's role is] to share their experiences and opinions more often; and to respond to various issues raised that may not have a correct answer, because the

majority of the time I specifically did not know what the correct answer was, I just wrote what came into my mind, and also from what I had read in relation to the topic”
(Participant 30)

It may be that some of these students may have lacked self-confidence, leading them to be more tutor-focused, looking to the tutor to approve and confirm the ‘right’ answers. These students' views are illustrated by the following comments:-

“worried I’ve got the wrong end of the stick? I’d want to share, but would want to be sure of myself first”
(Participant 32)

“what I’m looking at is just sort of a guide, and the reassurance that you were doing fine. Sometimes you felt that you may well be completely wrong, and yet you just go on with the discussion and you don’t know”
(Participant 12)

“Others might see it as an intrusion in the work that they are doing themselves, because they are in e-learning as adult learners and mightn’t want that input for themselves, but for me it was invaluable”
(Participant 14)

6.15 Organising Theme 4.2: Not Seeking Active Tutor Intervention in Online Discussion

In distinct contrast to the previous Organising Theme, however, other students reported that they did not seek active intervention in online discussions from their tutors. There were again two Basic Themes captured here, one reflecting the view that tutor intervention was **interference** in a student activity (online discussion), and the other representing those students who were not actively or voluntarily engaged with the discussion board, and who therefore sought instead **individual contact and support**.

6.15a Basic Theme: Interference

In the first Basic Theme, students regarded tutor intervention as **‘interference’** and expressed the expectation that tutors should be much more *‘hands-off’*, again suggesting that the function of the tutor should be more of a monitoring role rather than a more active engagement. This group also falls within the category of active discussants that we have termed ‘peer facilitators’ (Sherratt & Sackville, 2006a); and they can be seen as confident, articulate, and comfortable with the self-directedness of postgraduate learning. For them, it is clear that the online discussion board was largely for students, as peers, to support each other [as also noted in Section 6.7d]. The following comments illustrate this viewpoint:-

"If everything's going reasonably ok, there's no need to kind of interfere and interrupt that process"
(Participant 11)

"The purpose of the online discussion activities is peer support ... I think its about your own learning and supporting others to learn"
(Participant 13)

"I wasn't really interested in them [Tutors], I was interested in me and my learning, and what I could get out of the Group in terms of consolidating my learning"
(Participant 24)

"I didn't feel like I was writing for the teachers, I felt I was writing for the Group. I expected the rest of the Group would read what I had written, but I didn't particularly expect that the teachers would read every posting, and it wouldn't have mattered whether they did or not, because the intention was that you were writing for your peers, not for the teacher"
(Participant 1)

"Where there is someone in the group who is really good at facilitating discussion and getting or keeping things going, then I imagine that this would make the tutor's job much easier, and the need for tutor intervention would be reduced ... intervene only if discussion is not happening"
(Participant 4)

6.15b Basic Theme: Individual Contact / Support

Another Basic Theme within this area of the thematic network arose from a group of students who were not significantly engaged in the online discussions, and whose contributions seem to be motivated more by the fixed requirements of the course. For these students, only the formally assessed aspects of the course were important, and so tutor intervention within the online discussion board was not necessary, since the online discussion activities themselves were a distraction from the 'real work' of the assignments [see Section 6.4g for discussion of the notion of 'distraction']. The significance of the tutor for these individuals was their accessibility and availability for '**individual contact/support**', advice and guidance – most usually occurring in an individual dialogue, such as email. Thus, some indication that the tutor is active and available within the course is still important for these students, but not particularly related to tutor presence in the discussion board context. Illustrative comments from this group include:-

"I think the big thing for me was Personal Tutor contact time, around the assignments"
(Participant 17)

"The main objectives were the assignments. If you do a good assignment, you are off and basically you are cruising. ... if you say you're going to spend 15 minutes looking at the screen and read the other contributions and then you write your own, or spend that time trying to write a paragraph or two for your assignment, I'd say no, do the second, definitely!"
(Participant 9)

“Feedback so you know that you are on the right track, I think that’s the role of the tutor, and to be there, if you’re stuck, or there is anything that you don’t understand ... its just somebody is there if you need them”
(Participant 14)

“I felt that all the tutors were good. The main thing was getting feedback from the draft assignments. ... Wherever I could, apart from the actual draft assignments, I tend to just try to go it alone ... but right from the beginning on the first day, I said I don’t like group-work”
(Participant 11)

6.16 Summary

This chapter has presented analysis and data arising from interviews with students, including a number of themes which offer a lens onto the experiences of students during the year-long course.

To triangulate the data collected from students, interviews were also held with members of the tutor team, and so the tutors' views of their role are presented in the next Chapter, followed by integration of all the different strands of data to create a theoretical model, presented in Chapter 8.

CHAPTER 7: INTERVIEW DATA - TUTORS

This chapter presents thematic analysis of the data obtained from interviews with tutors, including the self-administered interview from myself, presented as a reflective statement [discussed in Chapters 3 and 4]. As already noted in Chapters 5 and 6, all analysis and coding for this study has been carried out by a single researcher (myself), and thus there were no issues of inter-rater reliability to consider. As also noted in Chapter 6, for verbal interview data, the robustness of analysis has been further enhanced by referring to the audio recordings alongside the typed transcripts, to extend the accuracy of interpretation of each interview.

Illustrative quotations are again used in this chapter, to represent the views expressed during the interviews. As previously, all names have been removed, and pseudonyms inserted where needed to maintain the flow of conversation, whilst protecting the identity of individuals.

7.1 Interview Data

The data obtained from the tutors on the programme comprised four interview recordings (transcribed), and a reflective statement from myself as the fifth tutor, using the list of questions as an interview or questionnaire [discussed in Chapters 3 and 4], to give 100% coverage of the programme tutors. The minimum length of interview was 35 minutes, and the maximum was 85 minutes, which is a similar range to that noted for the student interviews [see Chapter 6]. However, tutor interviews had a mean value of 61 minutes (compare student mean of 52 minutes), and a median of 62.5 minutes (compare student median of 48 minutes), possibly indicating a greater familiarity with the subject matter on the part of the tutors, resulting in greater confidence to discuss the questions and a concomitant need for fewer probes.

7.2 Thematic Analysis

As in Chapter 6, the emerging themes arising out of this analysis have been grouped and presented using a Thematic Network approach (Attride-Stirling, 2001). All of the Basic Themes presented here emerged directly from analysis of the interview/questionnaire data. It is readily apparent that there is great similarity between these Basic Themes and those arising from the student interviews [presented in Chapter 6]. Thus, to aid comparison and triangulation, the 'tutor' emerging themes have been presented under Global Themes that largely match the 'student' emerging themes:

CHAPTER 7: INTERVIEW DATA - TUTORS

- **Tutors' Perspectives of the Online Discussion Board [Section 7.3],**
- **Tutors' Perspectives on Student Engagement [Section 7.5],**
- **Tutors' Perspectives on Tutor Engagement [Section 7.7], and**
- **Tutors' Understanding of Students' Differing Needs for Tutor Intervention [Section 7.10].**

To avoid any confusion, the Tutor Thematic Networks have been numbered sequentially 5 - 8, following on from the Student Thematic Networks, 1 - 4 [presented in Chapter 6]. In particular, it is noteworthy that the match between the Basic and Organising Themes in Tutor Thematic Networks 5 and 8 are especially close to those identified in Student Thematic Networks 1 and 4 [see Chapter 6]. All of the themes that make up the four Tutor Thematic Networks are summarised in Tables 7.1 – 7.4, below:-

THEMATIC NETWORK 5		
Global Theme	Organising Theme	Basic Theme
Tutors' Perspectives of the Online Discussion Board	Purpose/Function of online discussion	Collaboration
		Evidence of engagement with the course
		Reinforcement
		Means to an End / Tool
		Reflection
		Satisfaction
		Good use of online discussion board / activities

Table 7. 1: Thematic Network 5: Tutors' Perspectives of the Online Discussion Board

THEMATIC NETWORK 6		
Global Theme	Organising Theme	Basic Theme
Tutors' Perspectives on Student Engagement	Student interaction	Peer facilitation & engagement
		Lack of interaction / engagement
		Professional Groups
		Group Cohesion

Table 7. 2: Thematic Network 6: Tutors' Perspectives on Student Engagement

CHAPTER 7: INTERVIEW DATA - TUTORS

THEMATIC NETWORK 7		
Global Theme	Organising Theme	Basic Theme
Tutors' Perspectives on Tutor Engagement	Tutor Role	Range of roles and responsibilities of online tutors
		Comparison of tutor role, online or face-to-face context
	Tutor Practice	Presence
		Achieving engagement
		Facilitation
		Timing
		Managing / Leading
		Experience / Credibility
		Stretching / Knowledge construction
		Valuing/ Encouraging
		Correction/ Policing
		Feedback
		Tutor / Student relationships
		Tension - to intervene or not
		Impact of other course experiences

Table 7. 3: Thematic Network 7: Tutors' Perspectives on Tutor Engagement

THEMATIC NETWORK 8		
Global Theme	Organising Theme	Basic Theme
Tutors' Understanding of Students' Differing Needs for Tutor Intervention	Seeking Active Tutor Intervention in Online Discussion	Stimulating / Challenging
		Reassurance / Expertise
	Not Seeking Active Tutor Intervention in Online Discussion	Interference
		Individual Contact / Support

Table 7. 4: Thematic Network 8: Tutors' Understanding of Students' Need for Tutor Intervention

7.3 Global Theme 5: Tutors' Perspectives on Online Discussion

Thus, the first global theme for tutors is focused on the **online discussion board** itself, and the tutors' own beliefs and values. Exploring this theme will allow direct comparison between the

tutors' intentions and the students' experience of the actual course [see Section 6.3]. This Thematic Network is presented graphically in Figure 7.1:-

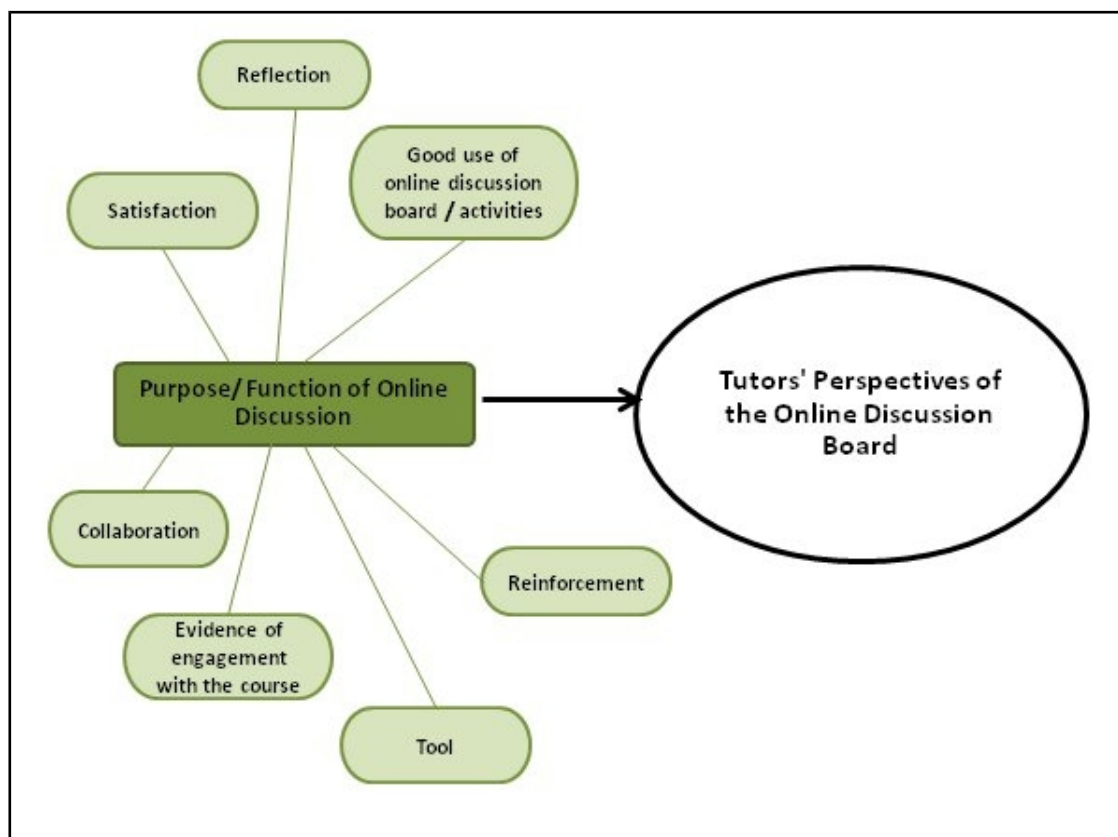


Figure 7. 1: Thematic Network 5, Global Theme: Tutors' Perspectives on Online Discussion

7.4 Organising Theme 5.1: Tutor Views of the Purpose/ Function of Online Discussion

As with the student interviews, the tutor interviews commenced with a general open question, along the lines of *"tell me about the online discussion board"*. This broad opening question allowed the interviewees some element of control, by inviting them to choose both what they shared and, to a certain extent, to influence the direction of discussion, by voicing their own opinions. In two cases, and also, my own reflective statement (self-administered interview), the general opening question led to the interviewee explaining their understanding of the function and purpose of the online discussion board and activities. However, for the two cases where this did not yield sufficient information, a follow-up question was asked, such as *"What do you feel is the purpose of the online discussion board?"* [see Appendix II for the outline of questions and prompts].

A total of 7 Basic Themes make up the the Organising Theme of '**tutor views of the purpose and function of online discussion**', and these are presented below:

7.4a Basic Theme: Collaboration

A strong initial theme to emerge, in terms of the intended purpose of the online discussion board, was '**collaboration**', and the opportunity for students to engage in dialogue and collaborative learning. This is illustrated by the following comments:-

“What I think it is intended to do is to work in a number of ways, isn't it? Its to give people the sense that they are part of a learning community, that their voice is worth listening to, to encourage them to articulate their own experience and their own feeling about this, to reflect on reading they might have done, and contribute that to the collective understanding – that's what I would say the purpose of the discussion board is” (Tutor 2)

“It really aims to try and develop dialogue online and get people to talk to each other, focusing on a particular topic or activity” (Tutor 1)

“It allows students to communicate with each other, despite studying at a distance; and it also fulfils our social constructivist philosophy - students construct their own learning from their own experience, a process which is helped by the need to articulate their experiences rather than simply reflecting internally; and this is then tempered by reading (and hopefully responding to!) the experience of others” (Tutor 5)

A substantial number of the students also shared this view of the intended function of the online discussion activities [eg: Section 6.4i 'Sharing'].

7.4b Basic Theme: Evidence of Engagement with the Course

A second theme to emerge from tutor interviews was the discussion board as a means of simply '**evidencing participation in and engagement with the course**' on the part of the students.

“one major role for the discussion board is capturing the Activities which have gone on in the course and providing a written account of people's ideas” (Tutor 1)

“The Discussion Board also provides ‘evidence’ that participants are actually engaging with the module - by posting comments on each of the activities, they show that they have read and/or considered at least some of the module material” (Tutor 5)

“it gives you an idea of the depth of their understanding and reading, gives you an idea, and it enables you too see those who are actively participating ... its trying to

show that they are doing it and for you to see if they are interpreting it and analysing it as well”
(Tutor 3)

This view resonates well with the students' theme of 'Assessing Progress' [Section 6.4f]. However, although the discussion activities were widely acknowledged as concrete evidence of student engagement, one of the tutors also offered the explicit reminder that lack of evidence did not necessarily equate to lack of engagement in the course as a whole. This, then, serves as a pertinent reminder of the unmeasured value of 'lurking' and silently reading the contributions of others, both educationally and in terms of community formation, as identified, for example by Beaudoin (2002), and Zembylas and Vrasidas (2007):-

“I think its dangerous to assume that because people aren't taking part in discussion that they're not actually listening intelligently, that they're not actually thinking things through for themselves, they're not learning a great deal from what's going on – so I don't necessarily think the students who aren't engaging are missing out. You know, I think that would be foolish of me to think that”
(Tutor 2)

This also raises the intriguing question of the extent to which students need to conform to the tutors' intention as regards the online discussion activities, and their social constructivist underpinning values (as highlighted by Garrison, 2011b), in order to gain a positive and productive learning experience.

7.4c Basic Theme: Reinforcement

A third theme to emerge from the tutor interviews was the idea that the online discussion activities serve to provide '**reinforcement**' of the students' learning during the module. Interestingly, there was no direct match between this theme and the insights of the students, although there is some resonance with the student theme of 'Curriculum' [Section 6.4c]. Tutors' views of this aspect of online discussion can be summarised thus:-

“for me it fills in the gaps in the students interpretation of the material ... this is a very vital fix in aiding interpretation, and the understanding and comprehension and then leading on to the analysis and the synthesis, and therefore it is important ... and its trying to bring that added dimension in, to taking them that one stage further, from what they have read, to how they can perhaps apply it, or taking some of our students from a very narrow focus in their particular area, to trying to get them to look at a broader canvas”
(Tutor 3)

“excellent idea, reinforcing the participants who are on a course, affording them the opportunity to re-enforce the theory work that they have taken on board ... Its really there to ensure that they have an understanding of the work that they have covered, but

its also so that they are using the online facilities to the best of their ability and to their advantage in enhancing learning”
(Tutor 4)

7.4d Basic Theme: Means to an End / Tool

However, whilst acknowledging the central importance of online discussion within this course, nevertheless, a consistent comment identified it as merely being a '**means to an end**' or a '**tool**' to achieving specific aspects of the learning experience, rather than an end in its own right. This viewpoint is illustrated as follows:-

“in my view, the discussion board is an integral and important part of the PGCert ... I see it as a collaborative tool. Its working well if people start to respond to each other and we get some form of debate”
(Tutor 1)

“the discussion board is a tool to aid students, to internalise the information, to come up with some form of clarity in thinking and to be prodded into doing other things”
(Tutor 3)

This viewpoint might be seen as having a certain resonance with the students' view of online discussion activities providing a 'Structure' to the course [Section 6.4a].

7.4e Basic Theme: Reflection

A further theme to emerge was that of the opportunity for '**reflection**' offered, and indeed encouraged, by the use of asynchronous online discussion – a point also highlighted by the students in their theme 'Reflection' [Section 6.4b]. Thus, it seems that there was a good measure of shared understanding of this aspect of the online discussion activities. The tutors' views are typified thus:-

“in terms of online, you don't get a immediate response, or you may not get a immediate response, particularly with the system being asynchronous, but when you get a response, its perhaps a more thoughtful response in the sense they have time to reflect on what you might have said or what other participants might have said, and then relate those contributions of other participants and yourself to their own experiences ... they have got more time to react to what has been said, and I think the feedback you get, the response you get is often thought out to a greater extent, and perhaps more meaningful”
(Tutor 4)

“The other thing about the Discussion Board is that it is asynchronous - and this offers opportunities not found in a classroom situation - for example, the possibility of reflecting first, and formulating a ‘considered’ response, rather than speaking ‘off top of head’.”
(Tutor 5)

7.4f Basic Theme: Satisfaction

The level of tutors' '**satisfaction**' with the online discussion board emerged as another basic theme. Here, it was clear that all five tutors were pleased with the way online discussion activities had developed in this course, and the overall impact they achieved. For example:-

“its been taken on board by so many, who have actually utilised what they gained in a meaningful way in the workplace, to enhance teaching and learning of students or their trainees, and on that basis, on the basis of its national and international recognition, it must be deemed as being successful” (Tutor 4)

Nevertheless, the tutors did not appear to be blinkered in their appreciation, acknowledging possible flaws and opportunities for improvement. The following comments illustrate this point:-

“I think it works. Whether it works as well as we would like is a different matter” (Tutor 1)

“I think it works to a degree, yes. ... I think there are claims that can be made for it which are irrefutable – its flexible, its convenient, over time it can be cheaper, all of those sorts of things. But I wonder whether it's offering as rich and deep an experience to learners as your more traditional methods might ... they're getting some chance to exchange ideas with each other, but it's not as full an experience as I think they might otherwise get” (Tutor 2)

“Experience is that the discussion boards are not used to potential, maybe because individuals have an initial aversion to using them, maybe a reluctance to actually open themselves up and put something in writing when they know that having pressed the button its there forever and a day, and for all to see” (Tutor 4)

“there are lots of things that are excellent about the discussion board for facilitating teaching and learning but you have got to have a willing participant” (Tutor 3)

This last comment is especially interesting and important, since it acts as a reminder that the online discussion board and its activities, *in and of themselves* are not meaningful, even as a tool [Section 7.4d] and that the tutors' planning will only come to fruition with active student engagement - compare, for example Gulati's (2008) views on compulsion to engage, discussed in Section 2.4e.

7.4g Basic Theme: Good Use of Online Discussion Board/ Activities

Leading on from the previous point, a further theme emerged – that of the tutors' views of '**good use of the online discussion board and activities**'. One view is that the activities can be

CHAPTER 7: INTERVIEW DATA - TUTORS

utilised by students to help them progress towards their assignments and their objective of achieving success in the module overall. For example:-

“‘Good’ use of the discussion board also assists students in formulating ideas and understanding in preparation for their assessment tasks” (Tutor 5)

“the activities themselves are very closely aligned (and the course material), with the assessments ... if students engage in the activities they will actually have done an awful lot of the thinking and spade-work towards their final assessments, which in themselves are important because they are the way that we judge whether they should be awarded the module. But they are also a way of drawing together in some coherent way, everything that they have been thinking about and studying, which for me, you know, in many ways is the most important part of it” (Tutor 2)

However, it was also clear that tutors' views of 'good' online discussion went beyond learning and preparation for assessment by individual students, and demanded also a level of continuing engagement, conscious and thoughtful dialogue, and interaction between participants. For example:-

“I think there are certain characteristics that are common to most examples of where the discussion board really works well. A regular, often quick-fire, set of responses, with a fair number of the group all contributing I think is a ‘must’. And ideas developing as a result of the dialogue - which might argue or challenge each other, or might agree and offer additional examples of how it might hold in practice ... so eventually conversation takes place rather than disconnected statements - and this can then develop to become academic discourse” (Tutor 5)

“I think a good discussion only results if the first contribution is sufficiently provocative, to stir up a response from others, and sadly that doesn't often happen. I think it requires somebody with experience, in terms of the profession that they are in and with a great degree of confidence to sort of stick their neck out and say this is what I believe, it certainly applies to X but I don't think it applies to other professions” (Tutor 4)

“if people just do a posting and no-one responds, so you get 22 postings and no-ones responding to any of them, its not really working very well, in terms of the aim of promoting collaborative learning and discussion - although it may be promoting individual learning and reflection ... I have to admit that it might be working very well for individuals who don't actually ever post anything except the one posting - its working then very much as an individual study. Its not really an activity-based discussion board - its an activity-based reporting board then” (Tutor 1)

Interestingly, this last point also resonates strongly with some of the students' experience and expressed dissatisfaction with the online discussion board as a 'Notice Board' [Section 6.7e], which in turn also links to the second Global Theme.

7.5 Global Theme 6: Tutors' Perspectives on Student Engagement

As noted above, the second Tutor Thematic Network, focused on '**tutors perspectives on student engagement**', links closely with the last point raised, and also resonates with Student Thematic Network 2, 'Student Engagement' [Section 6.6]. All tutors drew on their experience of other courses and other year-groups in commenting on students' online behaviours, but all also made specific links to the chosen cohort which forms the Case of this research. This Thematic Network is presented in Figure 7.2, below:

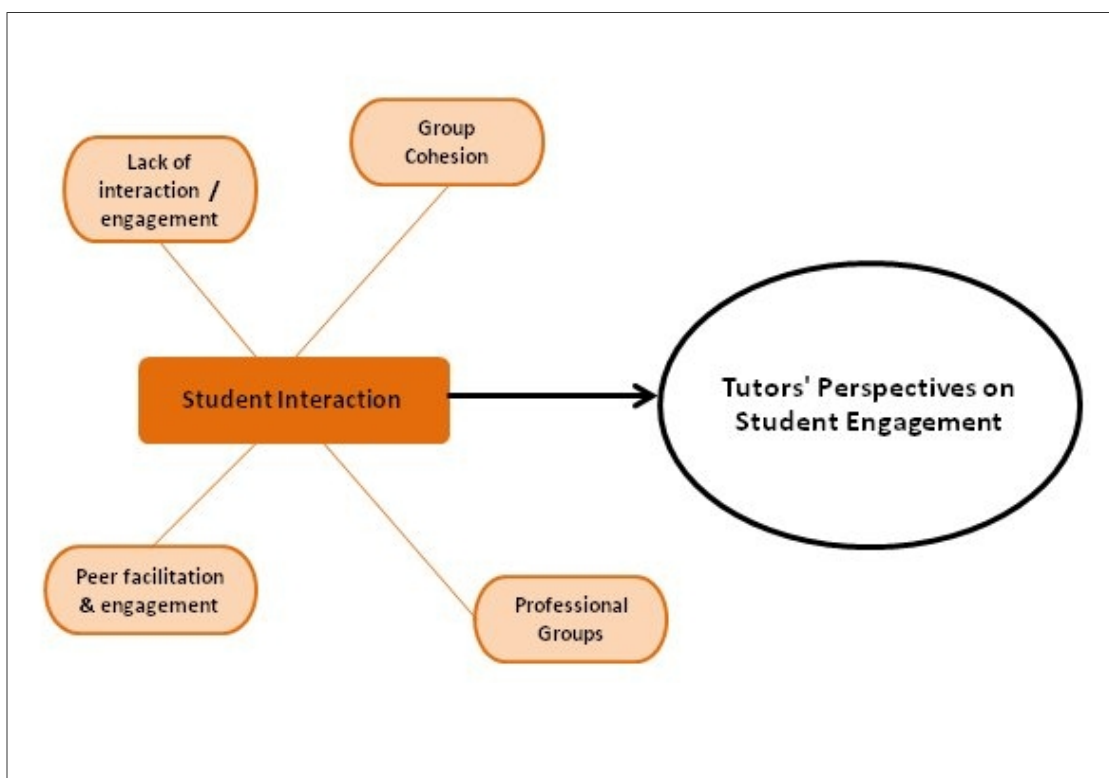


Figure 7. 2: Thematic Network 6, Global Theme: Tutors' Perspectives on Student Engagement

7.6 Organising Theme 6.1: Student Interaction

The tutors in their interviews focused substantially on '**student interaction**', and where interaction did or did not happen, both in general terms and with specific examples drawn from the chosen year cohort. This Organising Theme yields a total of four Basic Themes, which are presented below.

7.6a Basic Theme: Peer facilitation & engagement

The first basic theme to emerge is focused on '**peer facilitation and engagement**' by the students. The importance and potential impact of the presence of 'peer facilitators' on the group as a whole and on the development of inter-student engagement and debate has been noted earlier [Chapter 5]. The following comments illustrate this insight:-

"[I have previously] identified certain features of groups who will be active (even proactive!) on the Discussion Board - most notably the need for 'peer facilitators' to reply, question, and open out discussion into real dialogue" (Tutor 5)

"it probably worked better last year because I had people in the group who were more experienced, and who were perhaps more forceful in terms of their discussions that they tried to initiate, and the discussions that they contributed to" (Tutor 4)

"people do post their responses, and sometimes they engage with each other as a consequence of those responses ... I've actually found, in reality, that quite often they're quite good at stimulating each other to come online - they themselves at the end of their message will say, you know, 'what do other people think?' Or 'any views on this?' And people can actually be quite good at stimulating their own discussions" (Tutor 1)

It should be remembered that, in this course, the role of peer facilitator is an informal role that students adopt – sometimes without even being aware that they have done so. While, tutor opinion seemed to be divided regarding the extent to which student roles should be formalised, or even discussed – a debate which is replicated in the wider literature (eg: Gilbert & Dabbagh, 2005; Vonderwell & Zachariah, 2005; Hew & Cheung, 2008; Baran & Correia, 2009). These differing views can be illustrated thus:-

"I don't think they took on formal roles - I think they took on informal roles, roles we recognise, but not roles which they would necessarily overtly recognise" (Tutor 1)

"I have tried to ensure that all members of the learning set become involved by asking individuals to sum up each activity" (Tutor 4)

"I think that may be a way of organising so that people are told that they are responsible, as you would in a seminar, you're responsible for leading the discussion for Activity 3, Joan and Michael. ... that may be a way of making clear, I think, to students that there is a requirement really, for them to share what they know with other people" (Tutor 2)

"I didn't ask my groups to take on specific roles. I'm not aware of any formal agreements within the groups" (Tutor 5)

“I suppose I'm much more about they are adults, they're post-graduate students - we have a discussion at the beginning of the programme how they would like to run it, and then don't dictate to them roles, but say how do you want to do it? I was interested that other people had asked them actually to take on those roles, but I don't think the make-up of the groups would have been any other way”
(Tutor 3)

However, as an interesting development of informally-adopted roles, one tutor also expressed some misgivings about the actions of one of the peer facilitators in one of her groups. This may possibly have arisen because the role had not been explicitly discussed or agreed:-

“I got the impression a person agreed with himself that he would take on a certain role, and one or two acolytes supported him in that ... he seemed to be demanding more from the students than even the tutors would have demanded from them”
(Tutor 2)

A similar disagreement was identified in students' responses, with some favouring a purely tutor-led discussion and possibly showing signs of misunderstanding or even resenting facilitative intervention from fellow students, whilst others clearly welcomed it [Section 6.7d, 'Peer Facilitation']. Note that this is explored further in Chapter 8.

7.6b Basic Theme: Lack of interaction / engagement

A second theme to emerge may be seen as the opposite of the theme discussed above – that of the possibility of a '**lack of interaction or engagement**' on the part of the students. Again, this resonates with the experiences articulated by the students [Section 6.7f, 'Lack of interaction (Isolation & Frustration)']. The following comments illustrate tutors' views on the lack of student interaction and engagement:-

“they don't tend to respond to each other anyway, not in any real way, - they might say 'thank you for that, Mary' or whatever, but when it comes to it, they don't actually engage with what the previous person has said ... people quite often say things that are in themselves statements and don't have any kind of hook that enables you to get into it”
(Tutor 2)

“I did have a number of discussions with the other tutors regarding worries about inactivity on the part of some members of one group in particular”
(Tutor 5)

“the contributions were, I suppose, scant in terms of detail, and albeit there was some reflection, I got the feeling that much of it was 'we're ticking the box, we are doing this because we have to do it', rather than viewing it as being an educationally sound exercise, and an exercise that would reinforce from what they'd actually learnt”
(Tutor 4)

Tutors seemed to experience a deep sense of frustration when faced with students who were not willing to engage, or whose engagement was entirely strategic, thus impoverishing the learning experience. These views can be illustrated thus:-

“I think there are a number of students who still need to be winkled out – well, you know, I wouldn’t say forced into responding, but I’ve felt a bit ... I’m surprised that highly successful professionals aren’t themselves taking enough responsibility for their own learning” (Tutor 2)

“some, whatever you did, such as you sent an email saying 'I’m here talk to me', they just didn’t! And the only good thing about it was they continued to be the same for the whole year, and I didn’t feel that it was me they didn’t want to talk to!” (Tutor 3)

“Those who were 'Johnny Come Lately's' and reacted because they had to, because they suddenly realised that they had not done 70% of the activities, tended to put things online that were less meaningful, and at a time when the impact of what they said didn't really contribute to the overall discussion” (Tutor 4)

The extent to which tutor intervention might impact on the engagement and interaction of this type of student is explored further in Chapter 8.

7.6c Basic Theme: Professional Groups

One possible explanation for students' reluctance to interact in online discussion might arise from the presence of different '**professional groups**', and the associated hierarchies and professional rivalries that then ensue. This was a point highlighted by the students themselves [Section 6.7i, 'Professional Groups']. However, although several tutors acknowledged the inter-professional nature of the cohort, only one tutor expressly considered this as a possible explanation for lack of interaction, commenting:-

“I think it's unlikely that some of the more junior professionals, and certainly people from a nursing background or allied health professions wouldn't have the confidence to come back and to take on the more experienced medics” (Tutor 4)

7.6d Basic Theme: Group Cohesion

The final theme to emerge within this thematic network was that of '**group cohesion**', the extent to which students appeared to bond within their groups, and the impact of group cohesion on student engagement. It was clear that tutors had noticed differences in activity and interaction between the groups [as presented in Chapter 5], and voiced their opinions thus:-

CHAPTER 7: INTERVIEW DATA - TUTORS

“I think in many ways last year typifies our experience of a cohort split into learning sets - one was really active, one was really inactive (albeit with a couple of active members who talked just to each other), the rest more in the middle ground, with some members acting as strategic posters but some being active discussants” (Tutor 5)

“all groups are different, and groups are not necessarily just the sum of their parts - other things are going on in the group” (Tutor 3)

“I think it’s a mistake to see them all as a group, because within one group you can see at least three different groups ... they’re functioning as groups within groups. That’s how it worked” (Tutor 2)

“I don’t think last years cohort was as good as we have had ... Some of the Learning Sets were dysfunctional as learning sets, because of the nature of the mix of individuals” (Tutor 4)

This latter point is especially interesting, and it echoes the view of one student, who also used the word *'dysfunctional'* to describe her Learning Set [Section 6.7b, 'Group Identity'], commenting on the higher levels of group cohesion that were evident in other groups. Where groups did develop a feeling of cohesion and identity, this appears, to the tutors at least, to have been a student-only phenomenon, as evidenced by the following comments:-

“in the second group, there were closer relationships between members, because they started to talk about things from their personal lives, that weren’t relevant to the topic, and I wondered how excluded some of the other members might feel, by this apparent closeness between 2 or 3 of them” (Tutor 2)

“A rapport in the group, I think – but I’m not so sure how far it involved me” (Tutor 1)

“when I moved to my final group, I was interested that I was sent messages on the discussion board welcoming me to their group - clearly they felt incredibly well-bonded and I was the outsider” (Tutor 5)

The tutors feeling of being 'outside' the group, whilst students identified occasions when tutors acted as peers or colleagues rather than as authority figures, is interesting [Section 6.10f, 'Peer Relationship'], especially as this view was not clearly voiced by the tutors. Whilst it is possible that the idea did not arise during a discussion of *'the tutor's role'*, which probably focuses more on responsibility and authority, it is, nevertheless, interesting that the collegiality suggested, for example, by McWilliam's (2008) *'Meddler in the middle'* [Section 2.5b] was not apparent in any of the tutor interviews.

CHAPTER 7: INTERVIEW DATA - TUTORS

It was especially apparent in the language used by one of the tutors during interview, that she did not feel an integral member of any Learning Set [note that the impact on tutor practice of both group bonding and online engagement will be considered further In Section 7.91 ['Tutor/Student Relationships']].

*“I log on, on practically every working day, **I am a very frequent visitor**, and I look at what people have said”*
(Tutor 2)
[emphasis not in original]

For those groups (or sub-groups) where a good level of cohesion was achieved, there seems to have been a positive impact on the amount and quality of student interaction. This point is borne out in the data presented in Chapter 5, as well as by the students' own views [Sections 6.7a, 'Collaboration & Sense of Community' and 6.7b, 'Group Identity'] and indeed this further resonates with Henderson's (2007:171) proposition [discussed in Chapter 2] that students should “*feel accountable to each other*” in order to increase participation and sustain engagement. It is also apparent that tutors were aware of the positive impact of group cohesion in some, but not all Learning Sets, as illustrated by the following comments:-

“some groups were excellent, and 'formed, normed and stormed', and got on with it”
(Tutor 3)

“It is clear that for the active group there was some richness of debate” (Tutor 5)

It is also apparent that tutors were aware that a lack of group cohesion had an adverse impact on student engagement and interaction in some Learning Sets – resonating strongly with Henderson's (ibid.) proposition that this will lead a group to be more dependent on the tutor to 'broker' participation. For example:-

“Group X, prior to coming to me, had not done a great deal online, not done as much as perhaps they should have, and the tutor intervention was perhaps less than one might expect or hope for ... I think the problem, people feel comfortable or not, contributing online, some more than others ... I think the group had its extremes. There were some that were obviously better than others, and then there was the majority that were ticking over”
(Tutor 4)

“that particular group had fallen into the habit of being a bit moribund, so they weren't exactly a lively group ... they belonged to that group of people who don't want to engage ... and of course there is associated with that all the risks that you have when you ever ask students to take responsibility for things - if they don't do it then - well, its left up to the tutor then to step in and keep it going”
(Tutor 2)

This offers both confirmation and a potential explanation for earlier findings (Sherratt & Sackville, 2006a; Sherratt, 2009a), that tutor-focused groups did not develop true 'dialogue', but

rather stayed within the realms of individual statements and limited amounts of contributions. However, it also, in turn, raises a further question of which condition actually comes first – *ie* were the students tutor-focused *because* they lacked the group cohesion which leads to interaction? Or rather, did they lack group cohesion and the associated lack of interaction because they were tutor-focused (and possibly more strategically course-focused) in their engagement and expectations? This is considered further in Chapter 8, along with its associated implications for tutor practice.

7.7 Global Theme 7: Tutors' Perspectives on Tutor Engagement

The third Tutor Thematic Network is focused on the tutors themselves, and their views of '**tutor engagement**' in the online context. This resonates with Student Thematic Network 3, 'Tutor Engagement' [Section 6.9], although it is notable that a greater number and range of themes emerged from the tutor interviews, perhaps indicating a heightened awareness of their role, or perhaps simply stemming from having more years of experience to draw on. This Thematic Network is shown graphically in Figure 7.3:

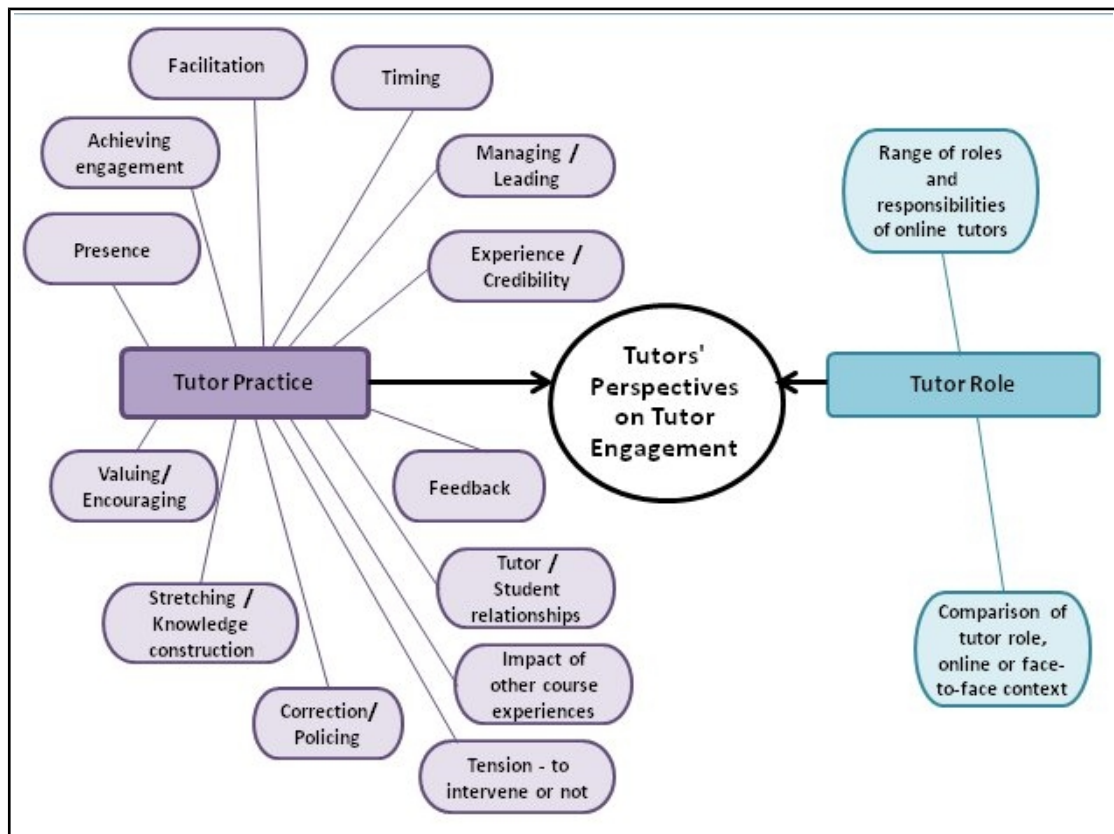


Figure 7. 3: Thematic Network 7, Global Theme: Tutors' Perspectives on Tutor Engagement

7.8 Organising Theme 7.1: Tutor Roles

The first focus to emerge from tutor interviews was the range of their own '**tutor roles**'. This was discussed by all five tutors in considerable detail, and can be divided into two Basic Themes, presented below.

7.8a Basic Theme: The range of roles and responsibilities of online tutors

All five tutors identified a '**range of roles and responsibilities**' which they, as online tutors needed to fulfil. Interestingly, some difference of opinion started to emerge here, with some tutors embracing a more supportive or even nurturing role, whilst others were more remote. Compare, for example, the following responses:-

"I think the person is there as tutor to mentor the individuals through the duration of the programme. There is a degree of overlap, mentoring, tutoring, coaching, they all fall under the same remit. I think whatever term you apply, you are there to guide and support, and then to provide feedback on what has been completed, what activities, tasks, assessment, and pick up the pieces, if the pieces need picking up" (Tutor 4)

"I have to ensure that the group functions, such that they are actually talking, rather than sitting in silence; and I also need to make sure that nobody gets left out & nobody is allowed to dominate" (Tutor 5)

"I don't want to appear to be harrying them, and I don't think its my role to nanny them" (Tutor 2)

Overall, the tutors identified a number of different roles that they need to fulfil within the online element of the course, most especially encouraging engagement and facilitation, which some seemed to find more comfortable than others. For example:-

"I think there's a second function that's about the dynamics of a group ... if discussion is slow to get started, putting up a reminder and encouraging people to become involved ... So I think that's another role" (Tutor 1)

"you are there to interact with students and make sure they are pushing all the appropriate buttons and facilitating learning" (Tutor 4)

"you don't worry about the [technical] delivery, because that's been sorted out, and it gives you more time to look at the facilitation, and ensure that you're meeting the students' needs ... the facilitation is the bit that is hard ... that is a challenge for online teachers" (Tutor 3)

“And the fifth [tutor role] which I’m no good at but which I think should be, there is one about perhaps being more questioning in discussions. It’s what I always try to do, but never succeed in doing, is asking more questions and trying to steer the discussion a bit”

(Tutor 1)

Some of these various tutor roles were identified as arising from a response to clear student expectations, rather than necessarily the tutor's own preferred style or own judgement. For example:-

“I feel communication is a really important part of the tutors role and the communication in context and delivering the situation has to be pitched at the person. So that’s why, for me, its difficult sometimes to get the right spin on what is going in that email, because I’m thinking, does that person have the same view on the situation? do I have the same experiences?”

(Tutor 3)

“I think some would like you to be more visible, but then all students have ideas about how they like their tutor to be ... some of them force you into a role of being ‘the tutor’ and the repository of all knowledge and all wisdom, which is a very sort of traditional attitude for some people to take”

(Tutor 2)

Note that these different viewpoints are explored further in Section 7.9, below.

7.8b Basic Theme: Comparison of the tutor role in online or face-to-face context

All five tutors made numerous comparisons between the face-to-face learning context and online context, in attempting to explain the roles they adopted. However, this may simply be due, at least in part, to the greater familiarity of the face-to-face classroom, and thus a greater number of metaphors were available from that context – and indeed, it is worth noting that all of the tutors, including the interviewer, had experience of face-to-face teaching as well as online. Their comments are typified thus:-

“there is a common denominator here between tutors on online programmes and tutors on face to face programmes. They’re there as a means of contact between participant and the institution offering award; they are there to guide and support - and of course, the guidance and support that is needed will vary on each individual”

(Tutor 4)

“I must maintain the group, as a chair or facilitator would do in a face-to-face group discussion”

(Tutor 5)

“its just like in a face-to-face having a difficult group or a straightforward group, and you have to spend more time thinking about how you’re going to engage the difficult group in a face-to-face group situation, than a straight-forward group, and it’s the same online”

(Tutor 1)

“Individuals have to contribute, that has to be made known to them, and sometimes they need to be reminded along the way. I think its just the same as if you’ve got shy and reticent people in a small group setting, you try and bring them on board, you try and involve them”
(Tutor 4)

“I would say that I’m not particularly good at it [online facilitation] because I prefer the human interaction”
(Tutor 3)

“I think, what has really struck me about the online discussions is that I always felt that I was fairly good at facilitating discussions with students, that I was able, you know, that I had all the skills that they say you’re meant to have, that I would listen to what people were saying, that I’d feed it back in different ways, and I’d, you know, I’d summarise at key points, all the sort of classic things ... those are the skills that I am aware that you need in order to be successful in face-to-face discussion. I find it much harder to see the places where you can do that in online discussion!”
(Tutor 2)

“I suppose there are many features that are similar, although from a personal point of view, to interact face to face is preferable because you can see, as a result of what is said, the feelings of an individual”
(Tutor 4)

It is clear from these latter three comments that although all five tutors were experienced online facilitators, some still felt more comfortable in the face-to-face context where they had first honed their skills as teachers. This serves as a useful reminder that the online learning environment is not a panacea, and suits some learners and some tutors better than others. However, this comparison was not expressed by the students in their interviews, although this had been explored during their online discussions [Section 5.7a].

7.9 Organising Theme 7.2: Tutor Practice

A second major focus emerging from the tutors was their view on their own '**tutor practice**'. This was a fruitful area of discussion with all five tutors, which allowed for deconstruction of the different aspects of online tutor practice, albeit with some disagreements. This Organising Theme therefore comprises 13 Basic Themes, which are presented below.

7.9a Basic Theme: Presence

All five tutors were conscious of their own '**presence**' within the online discussion board and the need to establish this in the eyes of the students. However, there were some clear differences of opinion regarding how to establish and maintain 'presence'. For example:-

“I also feel that overt ‘tutor presence’ as an aspect of the overall ‘climate of trust’ seems to be quite important when they are just getting settled - so seeing a posting from me will help to reassure them that I am actually there and reading what they are saying” (Tutor 5)

“Well I think its intervention about letting them know you are there, and listening to what they’re saying, and respecting what they’re saying” (Tutor 1)

“most people are interested and will pick up and run, and then I lurk in the background seeing what they are up to ... I tend to use the posting just to show that you are there, that you are lurking, rather than in their face” (Tutor 3)

“I certainly read them and then think well - and this is certainly the case if it is a early response, I think well I won't come in now, I'll come in maybe when everyone else has commented ... I probably don't respond as much as I should ... perhaps that's conscience more than anything else” (Tutor 4)

“it felt quite artificial sometimes, putting down what I thought and then tagging a question onto the end of it, that didn't feel to naturally arise from discussion, but felt more that I'd had to show that I was interested and that I was a presence” (Tutor 2)

These latter comments from Tutors 2, 3 and 4 indicate an acknowledgement of the need to show tutor presence, but at the same time, some concern over both the frequency of explicit posting (as compared to 'lurking') and the style of expression needed. Thus, we can see that Tutors 3 and 4 favoured less overt presence compared to the other three tutors, who specifically stated that they used discussion board postings to establish themselves as 'present'. This can be compared to the responses from the students [eg: Sections 6.10a, 'Lack of Evidence of Presence', and 6.10b, 'Evidence of Presence'], which make it clear that 'lurking' on the part of the tutor is not always either understood or appreciated. This fits to some extent with Tutor 5 who talks of establishing 'trust', and it is clear from student responses [especially in Section 6.10a, 'Lack of Evidence of Presence'] that trust was not easily built up when tutors were 'lurking' and reading postings but not responding.

We can also see, from the above comments, that Tutors 1 and 2 were both conscious of the need not simply to post but also to demonstrate their interest in what the students were saying, which can further contribute to establishing the climate of trust - although Tutor 2 seemed more conscious of this as a stylistic technique.

7.9b Basic Theme: Achieving Engagement

Another strong theme to emerge was that of tutor practice geared towards '**achieving engagement**'. There seemed to be a very good level of consensus regarding the need to encourage student engagement, and how it could be achieved. It was clear that all five tutors felt personally responsible for ensuring that their students engaged with the required online discussion activities, despite the students being mature postgraduates, with all tutors expressing the need to monitor and '*nudge*' their students to take part, either by email or via the discussion board. Typical comments are as follows:-

"If discussion is not going altogether, I think then a general reminder - I use a general reminder to everyone on the programme, but I don't always post it on the discussion board - I will send it to everyone individually in the mail, saying, you know, 'how about starting us off?' ... and someone will usually start us off then, and that's quite good"

(Tutor 1)

"In the first instance I put a general comment, to all of the learning set, which would be probably be along the lines of "activities - you are aware that you have to address 70% of the total number? albeit that its not its not part of the assessment, we do require it". If that doesn't work then I would tackle individuals via email ... but I've found that the general reminder, maybe takes 2 reminders, but the general reminders seem to do the trick"

(Tutor 4)

"I give them about 3 weeks, and if they haven't posted anything, I send them a very polite reminder"

(Tutor 2)

"I think by judicial monitoring, and then popping in and saying have you thought about this? or lets just see if there is anybody else out there who has got any ideas"

(Tutor 3)

7.9c Basic Theme: Facilitation

A third, and closely related theme to emerge was that of '**facilitation**', in terms of the type of interventions that tutors made, in order to stimulate debate. Here, there was some disagreement regarding the need for facilitative interventions by the tutors - a point which resonates with the views of Garrison and colleagues (2000) on students potentially supplying 'teaching presence' [Section 2.2]. The range of tutor views can be illustrated by the following comments:-

"I see the tutors role there to be much akin to the role in the PBL setting where you're there maybe as a facilitator of learning, not to actually teach ... there is a need for you to input, not in terms of teaching them, but to say 'have you thought about?' 'you should really consider this'"

(Tutor 4)

"I always finish off any posting I make by inviting comment, or asking a question - never just making it a 'closed' statement; and if I've replied to one person, then I always ask the rest of the group whether or not they agree" (Tutor 5)

"I think I was lucky, in the sense that there were certainly two if not three, probably more, almost natural 'peer facilitators' in that group ... And I remember thinking gosh its lucky these people are here - I don't need to do as big an input as I might have had to have done if they were not involved" (Tutor 1)

Interestingly, one tutor commented on a change of behaviour, indicating that she moved towards more facilitation only after she had established a relationship with the students in her group. This resonates most strongly with the finding of Kamin and colleagues (2006) [discussed in Chapters 2 and 5], that online tutors change their facilitation behaviour to match the specific needs of their students, once they have developed an understanding of them, their needs and their capabilities. It seems that Tutor 3 is indeed exemplifying this approach, explained thus:-

"Some people, you could feel you have got a rapport with them, that you can say 'I think you should go and do so and so', or 'have you thought about?', and there are other people that you have got to be much more directive with, in order for them to make the grade ... as you go on you form a relationship, and you are able to move into a more facilitative relationship" (Tutor 3)

7.9d Basic Theme: Timing

A fourth Basic Theme to emerge was that of the '**timing**' of postings and the frequency with which tutors logged into the online discussion board. This offers a good insight into the expectations that tutors felt they should meet in terms of general engagement with the course (as compared to overt 'presence', which is discussed above, in Section 7.9a). Typical comments are as follows:-

"unless I'm away on holiday or at a conference (in which case I let them know) I never leave it more than 3 days between logging into WebCT. BUT I certainly don't make postings every time I log in - that would lead to me dominating the board!" (Tutor 5)

"I try just to go in and see if anyone has made any comments. It may be once every 72 hours, I'll just nip in and have a look and then if nobody has done anything move on. I try to make sure I haven't left it any longer" (Tutor 3)

"I'm eager to see what's contributed, and when I open it up, I'm quite disappointed if I open it up and there is nothing new. And I get quite incensed, because I think a day has gone by and yes there is evidence you have been online, but why haven't you addressed these activities?" (Tutor 4)

CHAPTER 7: INTERVIEW DATA - TUTORS

The passage of time within the module was also identified by a number of tutors as being an important factor in influencing their practice. Tutors indicated a conscious awareness that students may need extra support, and possibly less challenge, in the early days of a module, while they get themselves properly established. This is illustrated by the following comments:-

“at the beginning of the course, I'll scroll down and see what people are saying and if its all going wonderfully well, I do nothing; and if there is comment that is sitting there on its own, I'll say thank you for starting this thread off” (Tutor 3)

“it depends very much on the time frame of the module, if you are at the start of the module, there very well could be initial teething problems ... and as I said there is often a reluctance to kick things off” (Tutor 4)

“I put more difficult discussion towards the end of topics” (Tutor 1)

“The other thing that might make me respond is simply a where we are in the course - establishing myself in their eyes needs to happen early on, as we start to build our relationship” (Tutor 5)

7.9e Basic Theme: Managing / Leading

A further Basic Theme to emerge from the tutor interviews was that of '**Managing and Leading**' the course, the group and the online discussion. There were clear differences expressed between the different tutors, regarding the extent to which they should be acting as managers and leaders, although all seemed comfortable in retaining the authority of the tutor role. This, then resonates with the proposition of Garrison and Cleveland-Innes (2005:137) that *“we find the leadership role of the instructor to be powerful in triggering discussion and facilitating high levels of thinking and knowledge construction.”* The tutors responded thus in interview:-

“the first function is, if you like, very much a course maintenance one ... maintaining the community rather than joining in the debate and the discussion” (Tutor 1)

“Well, the students have got to work at it as well ... I personally think in the classroom, you can deliver, you can be there, you can offer summaries, you can synthesise, and the student can take those away. If they are making their own understanding, through reading and discussion, then you are working with them, there isn't that role - both of you have got much bigger roles, and if they don't want to actually undertake that role, then you can't always take them on that much further along the learning continuum” (Tutor 3)

However, as also noted above [Section 7.9c], not all tutors felt that online leadership should always come from the tutor – a view which resonates with Xin & Feenberg (2006), and also Akyol and Garrison (2011b) who have proposed that students as well as tutors can undertake this role [as discussed in Section 2.2]. Some of our course tutors seemingly felt likewise – for example:-

“I would prefer it to come from the student participant than for me to say, 'have you thought about?' or I don't agree with this' and I would prefer that they did it” (Tutor 4)

“If someone has said something particularly valuable or interesting, then I'll often reply to highlight it to the rest of the group - unless someone else in the group replies and picks out the point. So I usually don't reply immediately (unless something needs correcting) - and that does give others the opportunity to pick up the valuable points and have a real discussion” (Tutor 5)

“I think that is quite problematic ... for me, as an individual person, a human being, I think it requires me to feel more confident in my relationship with the group of students. I've either got to be completely distant or I've got to be very much part of them, and that middle ground I think is quite difficult to occupy, when you're trying to give a lead, but also be collaborative” (Tutor 2)

Interestingly, these comments resonate strongly with the views expressed by the students [Sections 6.10e, 'Power and Authority', and 6.10f, 'Peer Relationship'] regarding the extent to which the tutor should be responsible for leading their discussion, or indeed the level of authority attached to the tutor status.

7.9f Basic Theme: Experience and credibility

A further, closely-related theme to emerge was that of the '**experience and credibility**' of the tutors. This can, perhaps, also be related to their view of the tutor's role as being one of authority, noted earlier [eg: Sections 7.6d 'Group Cohesion' and 7.9b 'Achieving Engagement']. Although the students did not make any specific comments about the level of experience that their tutors brought to the course, the credibility of the tutors as educators was seemingly assumed. In contrast, most of the tutors were quite conscious of their own level of experience and the influence this might have, both in the online discussion and in the course as a whole. For example:-

“I think there's always this struggle about not wanting to appear to be too distant with people, but at the same time, finding the right mode really, of expression, that also doesn't make you sound as well as if you're a 'know-it-all' ... because I do have a lot

of experience as a teacher, you know, 20-odd years – I have got a lot of things to draw on, you know, a lot of experience” (Tutor 2)

“I’m sure all providers of certificates in education worry about their teaching expertise ... what I feel I bring to the course is the realism of the real world in which they deliver their teaching and learning - so I find that a real challenge to stay ahead of them, because some of them are ahead of me, because they practice it every day. I practice it every day, but I don’t practice it in the clinical environment” (Tutor 3)

“If there is something that is controversial, or totally incorrect, or an assumption that is made that is incorrect, then I would come in, if I could relate it to my experience. If I couldn’t relate it to my experience, I would maybe come in with a comment ‘are you sure about this?’” (Tutor 4)

“I make no claim to being the ultimate ‘expert’ - simply someone who has some experience of the literature and the issues we are addressing - and of course my own experience is as valid as that of the rest of the group in terms of sharing it and potentially contributing to the overall learning of the group - but since I shall be marking their assignments, I do feel that I need to have some ‘credibility’ with the students!” (Tutor 5)

7.9g Basic Theme: Stretching / Knowledge construction

A further theme to emerge from the tutor interviews was their approach to '**stretching**' the students and their focus towards achieving '**knowledge construction**'. Whilst not a universally held view, it nevertheless emerged as a strong factor for most tutors, whose views are typified thus:-

“what you would like to do is to expand their vision of what they are doing instead of them staying in such a narrow focus ... I think its just prodding 'have you looked at so and so?' ... so if you can prod people or just say 'how about', or 'have you thought of' ... sometimes you can bring people back or get them think about different things, or even just get them to be more critically aware” (Tutor 3)

“The third role, I think is one about knowledge construction, which might be that they take up particular issues and provide new links to resources or other points of view or readings which no-one within that discussion has looked at” (Tutor 1)

“In addition, I occasionally offer references or other links for the group to follow up in relation to specific points that have been made ... to challenge & stretch the students - to ask questions that might extend the discussion” (Tutor 5)

This aspect of tutor practice resonates with some students' expressed need for tutor intervention [Section 6.14a, 'Stimulating/Challenging'] it will therefore be further explored later in this

Chapter, under Thematic Network 8, which is focused on Tutors' Understanding of Students' Differing Needs for Tutor Intervention [see especially, Section 7.11a, below].

7.9h Basic Theme: Valuing/ Encouraging

Meanwhile, a more basic and common step in tutor practice was identified as '**valuing and encouraging**' the students, in particular in the online discussion context. This was shared practice across the whole team, and can be illustrated by the following comments:-

"I try and make it in the spirit of somebody sharing their experience, so that other people will feel encouraged to share their experience" (Tutor 2)

"Its the quality of what's going on ... if its very limited or it looks its reached the end of a thread, summarising and saying you have made some points and you have said everything, get them thinking good and get a pat on the back. Throw a few 'well dones' in" (Tutor 3)

"If a discussion posting has been going on for, well four or five links in the thread, if I'm conscious that someone's joined that discussion posting who hasn't posted recently, or who needs some personal encouragement, I'm more likely to respond to the whole thread. In other words, I think again I'm using a hierarchy, I'm actually saying I'm gearing my responses not just to the actual points raised in a particular posting, but I'm gearing my responses to how I see the discussion going generally, and I'm gearing my responses to how I see the needs of particular learners who are either joining in or not" (Tutor 1)

"[the tutor's job is] making it a safe & reasonable place for students to post their contributions. This means partly contributing to & facilitating group-forming activity, ... and partly reassuring individuals regarding their contributions being valued" (Tutor 5)

However, one of the tutors also voiced a concern to ensure that students were not offended by tutor responses aimed at demonstrating valuing participation, commenting:-

"if I want to offer some individual encouragement, then I'll say it privately - thinking that it might be construed as patronising if done in public" (Tutor 5)

7.9i Basic Theme: Correction/ Policing

This same concern for the feelings of individuals was voiced by tutors when discussing their practice in another emergent theme, that of '**correction and policing**' of the online discussions. This is typified by the following responses:-

“there was somebody who did do something that I didn’t think was right, so I said something on the discussion board, but I did email them privately underlining what I’d said a little bit more, from the point of view of what he’d said, rather than you know, picking on him in public”
(Tutor 2)

“If someone has said something that needs challenging or correcting, then I’ll reply to them as an individual (often in more detail), as well as a gentle ‘public’ response ... so I sometimes need to be polite & reassuring, whilst challenging wrong views so that they don’t mislead the rest of the group ... whilst at the same time not embarrassing the individual ... not being confrontational & maintaining her self-respect (& the respect of the group)”
(Tutor 5)

In addition to concern for the individual, tutors also expressed the opinion that part of their role was to intervene to ensure that other group members were not adversely affected by the actions of any individual. This view is illustrated thus:-

“you’ve got to think of all the participants on the programme, particularly those in your own learning set, and you don’t want rantings and raving of one individual to cause upset. Yes, you establish from early days that everyone has a right to contribute, but they have got to be respectful of others, and they have got to make sure that what they put online is not going to upset”
(Tutor 4)

“It is sometimes necessary for an element of ‘policing’ can also be my job - if anyone says something offensive or otherwise inappropriate, then it’s up to me to get it removed and to ensure that others have not been hurt or de-motivated by the posting; whilst intervening with the culprit to ensure they understand why it was not acceptable”
(Tutor 5)

The students, themselves, did not appear to consider this aspect of the tutor role as significant, despite some of them seeking the opposite - reassurance that they were, in fact, correct [eg: Section 6.14b]. However, it is possible that the reason that this did not surface as a theme in student interviews is because these were very isolated instances (and indeed, Tutors 2, 4 and 5 each only identified one such instance in the specific year-cohort). A comment from a different tutor also confirms this view:-

“I never had to reply privately, because they have all been on the right track”
(Tutor 3)

7.9j Basic Theme: Feedback

Another aspect of tutor practice which emerged as a theme was that of giving 'feedback' to the students. This was discussed frequently by all five tutors, as an important aspect of their practice, and is illustrated by the following comment:-

“I think that one of the things I’m quite good at is giving feedback, if students send me draft work, and I do that by annotating their documents and sending their documents back to them”
(Tutor 2)

One key aspect in relation to feedback was that of timing, and the extent to which tutors were able to meet student expectations. For example:-

“I have always been conscious that although I always provide feedback, I’m perhaps late in the day in terms of doing so”
(Tutor 4)

“Definitely the email comes into the formative assessment - people will send you the drafts or they will send you ideas. I got one on at 7:15 Tuesday night and Wednesday morning, I got another email saying you haven’t replied to me ... the students expectations are the same as a student who turns up at your office door, who wants you to read their assignment straight away - and its intensified by the email sometimes, that they think you would instantly reply”
(Tutor 3)

The issue of feedback is one that resonates with the views expressed in the student interviews [Section 6.11d, 'Tutor Feedback/ Individual Interaction'], and perhaps indicates a shared value between the course team and many of the participants, regarding the usefulness of formative feedback on draft work as a learning tool.

7.9k Basic Theme: Tutor / Student relationships

A further, important theme to emerge from tutor interviews was that of the development of 'tutor-student relationships', which was alluded to in the previous theme [Section 7.9k, above]. All five tutors commented on the relationship they built with their students, and the impact of this relationship on the course, both in general and also in the specific year-group of the research study. In particular, tutors highlighted the closeness of the relationship with their online students, which can be illustrated thus:-

“I find something, strangely enough, paradoxical about the intimacy of corresponding with people”
(Tutor 2)

“There has to be a good rapport established between tutees and tutor before a somebody is going to open up and say 'I'm falling by the wayside'.”
(Tutor 4)

“I do monitor engagement - and if I notice that someone is not responding, then I send them a gentle WebCT-mail to ask if all is well ... If a student is having any sort of difficulties, then they can tell me at this point & we can address the situation before it reaches a crisis”
(Tutor 5)

However, all tutors articulated some feeling of difficulty arising from changing tutor-groups between modules, something which was a new feature of the course. On reflection, this

seemingly led to the tutors feeling less confident and less satisfied with their relationships with their Learning Sets (which were, indeed, shorter-lived), and as a result, they identified an adverse impact on their actual practice during the year that forms the focus of this research. This view can be typified by the following comments:-

“I found last year particularly challenging because you develop a relationship with your students and you see the threads and you can follow that through on the study days. But last year with the moving of the groups, you were just getting to that point where you could read between the lines, and then you were going to another group”

(Tutor 3)

“I found it relatively easy to build relationships with the students, but then had to start building all over again when we moved to the next group - this I think was perhaps a de-stabilising influence”

(Tutor 5)

“in the first one my role was normally as I would be, which is accessible, but not overly friendly ... but I wasn’t sure if the students were satisfied with me as a tutor in the first one, so I thought in the second one, I’ll try and be a bit different, and it didn’t work. ... the relationships within the group had already been set up, and it takes time to get to know a group of people, and by the time I’d go to know them, they were even further entrenched in their behaviour as a group, so I felt permanently an outsider with the group ... I think it had quite a lot of impact ... I was quite reluctant to engage with them on the discussion board, though I was perfectly happy to engage individually in email”

(Tutor 2)

On the other hand, some tutors commented on the strong and favourable aspects of their relationships with certain groups of students during that same year, and this is illustrated thus:-

“I was aware that this group also contained some real ‘stars’ - and I think I did try to ‘stretch’ them a bit at times. There was quite a lot of dialogue in my group in that final module”

(Tutor 5)

“I remember thoroughly enjoying the first module, with that particular group ... I thought that went quite well. I found the majority of them were quite active online ... I think the rapport was quite good”

(Tutor 1)

“I did develop more of a rapport with certain students than with others ... several of the people who seemed to really ‘gel’ with me were never in my Learning Sets, so our contact had to be all by WebCT-mail ... what that means of course is that I had no opportunity to influence how they responded to the online Discussion Board (although you might be able to spot my influence in their assignments!)”

(Tutor 5)

7.9I Basic Theme: Tension - to intervene or not

A very strong theme to emerge from the tutor interviews was the '**tension of deciding whether or not to intervene**'. This was universally identified as a major challenge for the online tutor,

exemplified by comments such as:-

"I still have some issues in my own mind about the tension between intervening early, and allowing students to have the discussion board to themselves and to have a policy of low intervention ... the early literature being quite encouraging of tutors not to be too interventive, but to be like the 'ghost in the wings'; and yet more recent research literature is actually saying that there's a need to have a teaching presence there!"

(Tutor 1)

"I think well I won't come in now, I'll come in maybe when everyone else has commented"

(Tutor 4)

"I was always having to weigh up whether or not that was me being intrusive ... I've also watched and thought well I don't want to be 'muscling in' on the discussion, but you know, its quite difficult when you're the tutor in these circumstances, to know when the best moment is"

(Tutor 2)

The question of when and how to intervene is clearly of great significance to online tutors, and so it is explored further in Chapter 8.

7.9m Basic Theme: Impact of other course experiences

It was clear from the interviews that all five tutors were involved, both past and present, in other courses in addition to the one under consideration in this research, and that this experience covered of a wide range of styles, including face-to-face delivery as well as blended, online, and traditional distance learning. It was apparent from some of the interviews that there had been considerable '**impact of other course experiences**' which had influenced their thinking and their practice as an online tutor in the current course. In particular, Tutors 2 and 3 were obviously extremely comfortable maintaining one-to-one interaction with their students, using email; whilst Tutor 4 was apparently influenced by his experience of the PBL model of 'arms-length' facilitation. This can be illustrated by the following comments:-

"I have been involved 9+ years with PBL, PBL tutorials, primarily in the medical arena ... as a facilitator, you're there to keep the students on track, to ensure they set their learning objectives, and they go away and do the work and they come back and they discuss ... there is a need for you to input, not in terms of teaching them, but to say 'have you thought about?'"

(Tutor 4)

"I used to tutor online distance learning students doing Postgraduate Certificate and Certificate of Education, for the University of X, but we didn't have at that time, a discussion facility, and so it was very much more about me tutoring individuals, it was more a one-to-one relationship – that was more by email ... I didn't feel any difficulty with that at all, partly because the students themselves were providing things for me to

respond to, and so I didn't feel that I was working in some kind of vacuum with them, you know, trying to encourage responses if none were forthcoming" (Tutor 2)

"many of the students on the MEd seem to use email rather than the discussion board, so they are emailing each other and they are emailing me, and if I could get them to do that on a discussion board, it would be a big step forward" (Tutor 3)

"I know as a distance learning student myself, with the Open University, I was never in the least bit interested in going to the chat-room" (Tutor 2)

7.10 Global Theme 8: Tutors' Understanding of Students' Differing Needs for Tutor Intervention

The final Tutor Thematic Network is focused on the tutors' understanding of students' differing needs for tutor intervention. This thematic network is shown in Figure 7.4 [below]. As noted earlier, this network captures themes and insights which emerged naturally from the tutor interview data, but is presented in this way specifically to aid comparison with the views of the students regarding their need for tutor intervention [Section 6.13]. Tutors views regarding the students' needs can be classified into four distinct Basic Themes, two of which fall into the Organising Theme of '**seeking active tutor intervention in online discussion**', and two representing the opposing view, located within in the Organising Theme of '**not seeking active tutor intervention in online discussion**'.

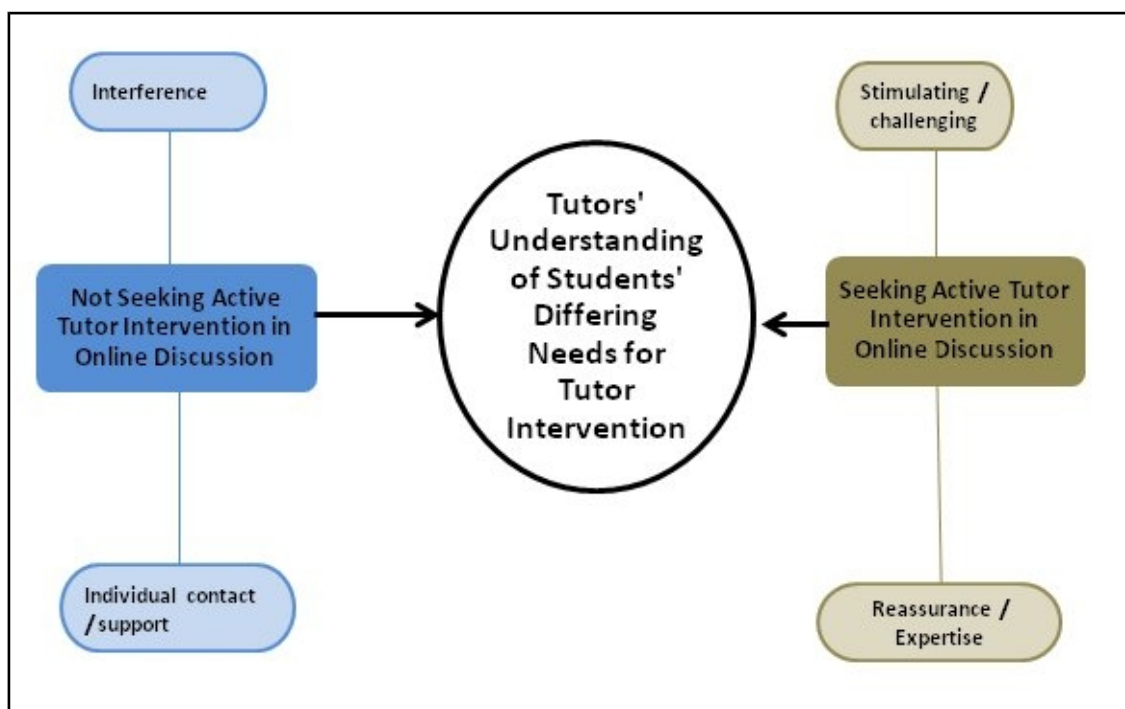


Figure 7. 4: Thematic Network 8, Global Theme: Tutors' Understanding of Students' Differing Needs for Tutor Intervention

7.11 Organising Theme 8.1: Seeking Active Tutor Intervention in Online Discussion

The first Organising Theme showed tutors' awareness of students' need for them to take an active role within the online discussion activities. As in Student Thematic Network 4, there were again 2 basic themes included here:-

7.11a Basic Theme: Stimulating / Challenging

The first aspect, that of **stimulating and challenging**, also resonates with tutors' actual practice, identified earlier [Section 7.9g, 'Stretching / Knowledge construction']. Tutors were clearly aware of the role they could fulfil in relation to extending learning, and the students' need for this challenge, albeit some more than others. This is a very close match to the needs actually expressed by some of the students [Section 6.14a], and can be illustrated thus:-

“its about aiding the students' understanding, but doing that through prodding, through suggesting, by summarising if that is appropriate, the different threads, or by saying 'well done that's an important point that you have raised'” (Tutor 3)

“If one student makes an especially important point, then I may well respond to highlight the importance of this idea - and usually at this point I'll invite the rest of the group to either consider this idea or else to reply to indicate whether or not they agree according to their own different experiences ... or else I'll make a comment myself & finish off by asking - 'thoughts anyone?'.” (Tutor 5)

“therefore it comes down to that issue about the sorts of interventions that are made. So you see - perhaps I should be more interventionist, but interventionist in a certain way, not in a directive way” (Tutor 1)

7.11b Basic Theme: Reassurance / Expertise

It is apparent that the tutors were aware of a need by some students for more '**reassurance**', and possibly for them to provide a measure of '**expertise**'. This insight matches the views and experience of some of the students [Section 6.14b], and can be illustrated thus:-

“In a couple of cases ... we have come to an agreement whereby they can send me their first few postings via WebCT-mail & I'll respond privately to them. This sometimes gives them sufficient confidence to post the same message onto the group forum; and in other cases it builds courage more slowly - but in all cases, by about activity 3 or 4, the problem is solved and sufficient confidence has been achieved so that they can take part 'normally' in the discussion board” (Tutor 5)

“I find one of the things interesting with our students is some of them are much more comfortable with prescription ... its risky and dangerous to be unsure about things, and I entirely understand that, because prescribing drugs for people, you know, you want to be sure that they’re the right drugs - but with something like teaching & learning, I think you have to be a bit more - open-minded, if you like, a bit more flexible ... you should be able to structure lesson-plans, but at the same time, I always want to say to people that these are only intentions, and that you shouldn’t think you’ve failed because you don’t stick entirely to them” (Tutor 2)

“I also try to reply to people who I feel might need their confidence bolstering; and I also try to ensure that I don’t always reply to the same few individuals over the course of a module ... by specifically targeting my responses to support individuals & to give the message that everyone in the group is valued” (Tutor 5)

“if its somebody out on a limb, its thinking about what could bring them back to mainstream, perhaps commenting, if they have gone off at a tangent” (Tutor 3)

“I think some would like you to be more visible, but then all students have ideas about how they like their tutor to be ... some of them force you into a role of being 'the tutor' and the repository of all knowledge and all wisdom, which is a very sort of traditional attitude for some people to take” (Tutor 2)

7.12 Organising Theme 8.2: Not Seeking Active Tutor Intervention in Online Discussion

Tutors were also aware that some students did not need them to post on the discussion board – although they acknowledged that they still seemed to need some tutor support. This, then, becomes the second Organising Theme, comprising the themes of '**interference**' and '**individual contact and support**':-

7.12a Basic Theme: Interference

All tutors were clearly aware that some students preferred to be self-directed and peer-facilitated, rather than needing or inviting tutor postings in online discussion activities. This tutor insight corresponds closely to the view expressed by some of the students [Section 6.15a] and is typified thus:-

“Some [students] couldn’t care less if you don’t say anything – you know, they would actually feel your presence as intrusive rather than actually being constructive” (Tutor 2)

“if the discussion is going pretty swimmingly, then I’m less likely to say anything, as I’d just be intruding and they are doing perfectly well already” (Tutor 5)

“But that’s where you get into this problem of how far it’s their discussion board and how far it’s the tutor’s discussion board” (Tutor 1)

7.12b Basic Theme: Individual Contact / Support

The final theme is focused on the students' need for individual support, outside of the discussion board context. In many cases, the root cause is a lack of understanding of the purpose of the online discussions on the part of the student - but where conventional encouragement did not yield engagement in the discussion board, some tutors clearly felt obliged to offer other support to meet individual students' needs. This view also resonates strongly with the views expressed by some students [Section 6.15b] and is illustrated by the following comments:-

“In one or two cases, I would go even further when they are getting dreadfully behind and I’ve actually said to people OK its not discussion - group discussion - but if you feel very conscious about posting 4 weeks late, post something individual to me on the mail and I’ll respond, and it’s a different thing because its a dialogue then and it’s a two-way communication, not a group discussion” (Tutor 1)

“I think at this level I find it quite surprising that there are some apparently very reluctant participants - and that’s not to say that they aren’t engaging with the material, its just they’re not engaging in discussion with other students. They may be emailing privately” (Tutor 2)

“if somebody doesn’t want to go on the discussion board, how you make them, and that’s the bottom line isn’t it? ... so all you can do is, if they don’t want to talk to anyone else, get them to email you privately, or if they are really, reluctant, then ring me! I will always say to a student please ring me and we will discuss this” (Tutor 3)

7.13 Insight

It is clear from the interviews that all five tutors (including myself) were not always conscious of their own practice and often found it difficult to articulate. Comments illustrating this challenge were peppered throughout all of the tutor interviews, for example: *“This is an interesting one - more taxing to answer than I’d expected”* (Tutor 5); *“that’s a difficult one to answer”* (Tutor 2); *“it sounds garbled, I’m afraid!”* (Tutor 4); *“I have never really thought about that”* (Tutor 3).

These tutor comments seemingly resonate strongly with the Dreyfus' (2004) notion of the 'expert' as one whose decision-making is, or has become, intuitive rather than conscious - and this would explain why tutors sometimes found it hard to articulate the rationale for their own

practice. Furthermore, it was apparent that some tutors tried, during the interview itself, to unpick and articulate their unconscious behaviours for the first time, for example:-

“You’re actually making me think about this quite hard, because it is quite interesting, that I hadn’t before thought if I had a hierarchy in dealing with mail and postings, but I think I do. And if I think about it, I can actually see the way I start to handle these sorts of things”

(Tutor 1)

“this is just me, you know, thinking it through ... reflecting on what I’ve experienced so far, and trying to make some sense of it, draw some conclusions”

(Tutor 2)

It is notable that some commentators (eg: Benner, 2004) have suggested that individual practitioners can be at different points on the Dreyfus scale at the same time, when in different contexts. Benner (ibid.) uses the clinical example of nursing adults or children with the same condition. However, this difference in an individual's level of expertise and associated repertoire to cope with different situations clearly also resonates in the teaching context. Thus, our own tutors can be experts, but still need to regress to analytical reasoning (and, perhaps, 'proficient' or even merely 'competent' status) rather than the unconscious decision-making of the expert, when faced with an unfamiliar situation, such as a student group which does not behave in the way they might expect. This point is illustrated by the following response:-

“I have been seriously looking at my own perceptions of what are student roles ... the group I started with were not going to play, and they were not going to play with anybody, so it made me re-think everything”

(Tutor 3)

Thus, it appears that even for highly experienced online tutors, there would be some considerable value in being able to refer to a model that differentiates student needs for intervention, and offers a framework for decision-making and for choosing the most suitable intervention to make in order to meet specific student needs, and so this is explored further in Chapter 8.

7.14 Summary

All of the tutors on this programme had a good level of conscious insight regarding their own roles and practice, albeit some more so than others, and they were also conscious of students differing needs for tutor support and online intervention. However, when taken alongside the students' experiences in Chapter 6, it is clear that actual tutor (unconscious) practice was not always focused or optimal in meeting all of the students' particular needs. Indeed, it is clear

from the views expressed by tutors in Section 7.14 (above) that their experience was *not* consciously applied in decision-making, which may sometimes have led to contradictions in behaviour, and may also have led to some cues from students simply not being spotted and actioned appropriately, or possibly even being ignored where tutors felt that this would be in the students' best interests. The following comment typifies this debate:-

“its always a challenge to satisfy the need as you perceive it really, but also trying to keep true to what you think you should be offering the students, which sometimes cannot be what they think they want, or they say they want, or they know they want – if you think its different then you’re not going to be able to provide it are you?”

(Tutor 2)

The extent to which tutors can consciously identify students' needs and utilise this analysis to provide the most appropriate intervention will therefore be discussed in Chapter 8.

CHAPTER 8: CONVERGENCE AND THEORY GENERATION

In a convergent 'mixed methods' research design, the two strands of data (qualitative and quantitative) should be fully integrated together as a final phase of work, following initial, separate analysis, in order to tell the complete story of the 'case', and to generate theory (Creswell & Plano-Clark, 2007; Teddlie & Tashakkori, 2009). The individual elements of data from this study have been presented and discussed in Chapters 5, 6, and 7. This chapter is the point of interface ('convergence') for these different elements [see Chapter 3, especially Figure 3.4], and so the data-set is considered as a whole.

Some resonances between student and tutor interviews have already been identified in Chapter 7, highlighting shared values, beliefs, and experiences between students and tutors. This discussion will now be expanded and enhanced by integrating it with the discussion board analyses presented in Chapter 5, to develop a cohesive model of students' needs for tutor support and intervention, along with a diagnostic check-list, to facilitate tutors in utilising the model in practice.

8.1 Integration of Qualitative and Quantitative Student Data

From analysis of the discussion board archive [Chapter 5], it is clear that different groups and also individuals within those groups had very different posting behaviours, both in general and in different modules, and that these differences were significant in terms of overall quantity of postings [Section 5.2], which ranged from 60 (Learning Set A, Module 1) to 222 (Learning Set B, Module 2); in terms of students' achievement of Dialogue (Sackville & Sherratt, 2006) [Section 5.3], which ranged from 0 (Learning Set A, Module 3) to 31% (Learning Set B, Module 3); and in terms of Community of Inquiry 'presences' (Garrison & Anderson, 2003) [Section 5.4], for learning sets the CoI Teaching Presence ranged from as little as 12% (Learning Set A, Module 3) to 94% (Learning Set B, Module 2), and individual student contributions to CoI Teaching Presence ranged from 0 (five students in Learning Set A, Module 3) to 47% (one student in Learning Set B, module 2).

When exploring the themes that emerged from student interviews [Chapter 6], it became apparent that students whose views and experiences gave rise to each of the four Basic Themes In Thematic Network 4 (Global Theme 4, 'Students' Need for Tutor Intervention') [Sections 6.13

CHAPTER 8: CONVERGENCE & THEORY GENERATION

- 6.15] acted in particular ways in relation to their levels of engagement with online discussion. Thematic Network 4 is summarised in Table 8.1:

THEMATIC NETWORK 4		
Global Theme	Organising Theme	Basic Theme
Students' Need for Tutor Intervention	Seeking Active Tutor Intervention in Online Discussion	Stimulating / Challenging
		Reassurance / Expertise
	Not Seeking Active Tutor Intervention in Online Discussion	Interference
		Individual Contact / Support

Table 8.1: Thematic Network 4: Students' Need for Tutor Intervention

In particular, those students from the Basic Theme 'interference' [Section 6.15a] were, without exception, active discussants (with a mean number of postings of 19 and a mode of 15, when the minimum expectation was 4); whereas those from the Basic Theme 'individual contact/support' [Section 6.15b] were all minimally involved with the discussion board (with a mean of 6 and a mode of the bare minimum course requirement, just 4 postings).

Similarly, all students from the Basic Theme 'stimulating/challenging' [Section 6.14a] were also active discussants (with a mean of 20 postings and a mode of 22); and the students from the Basic Theme 'reassurance/ expertise' [Section 6.14b] posted far less frequently (with a mean of 8 and a mode of 7 postings), although it should, perhaps, be noted that this was still more than the basic course requirement.

These 2 strands of data can be combined together and plotted on a simple graph, using the Organising Themes of 'seeking/not seeking tutor intervention' as the extremes of the X axis, with level of activity (indicated by high/low quantity of discussion board postings) forming the extremes of the Y axis. This graph is presented in Figure 8.1, overleaf.

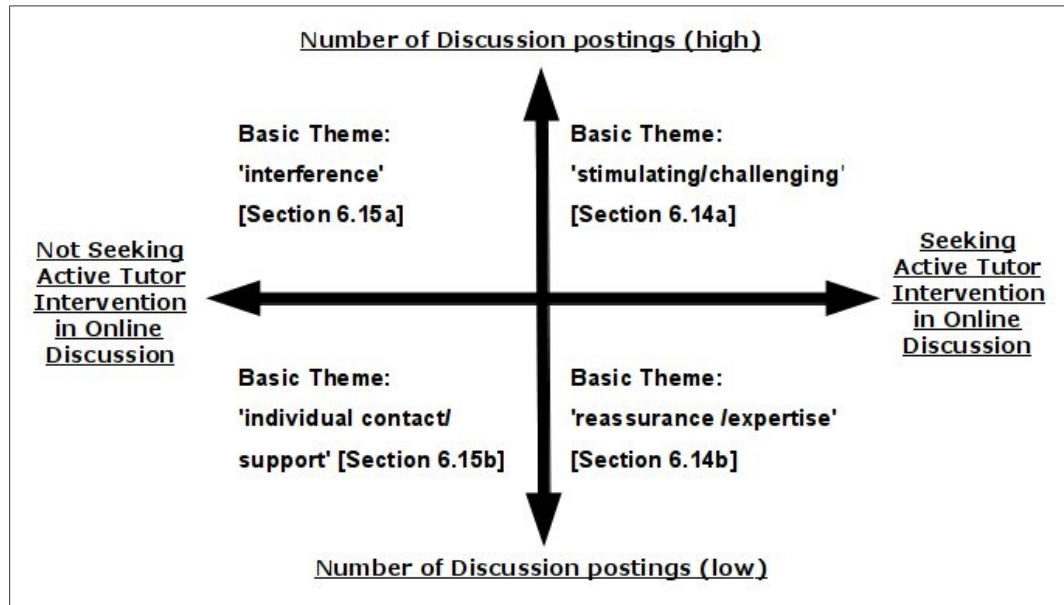


Figure 8. 1: Graph showing Thematic Network 4 and Number of Postings

8.2 Emerging Model of Students' Expressed Needs for Tutor Support & Intervention

Thus, a quadrant model has emerged, which offers a summary typology of students' online behaviour and expressed need for tutor intervention [Figure 8.2]:

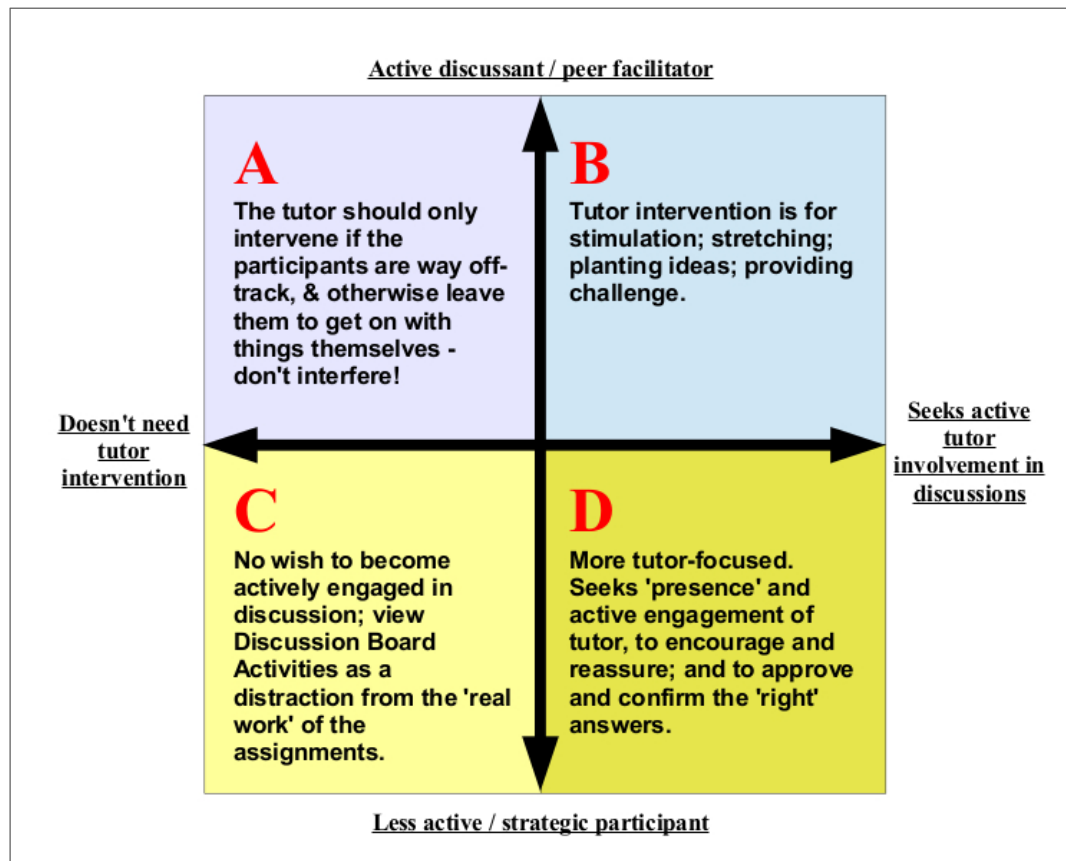


Figure 8. 2: Students' expressed need for tutor intervention in online discussion (Sherratt, 2012)

Note that the development of this model has also been described elsewhere (Sherratt, 2008a, 2012).

8.2a Quadrant A

As noted above, students from Basic Theme '**interference**' [Section 6.15a], characterised to Quadrant A, are strongly self-directed, active discussants. This group are typified by the following comments:

“The need for a tutor intervention should be kept to a minimum”
(Student discussion posting, Learning Set C)

“we’re able to pace our own discussions without any intervention from the tutors”
(Student discussion posting, Learning Set B)

“is Tutor input absolutely essential? I don't think so. I am learning from input of entire group”
(Student discussion posting, Learning Set C)

“I wasn’t really interested in them [Tutors], I was interested in me, my learning, and what I could get out of the group in terms of consolidating my learning”
(Interview: Participant 24)

A discussion board activity profile for an exemplar student located in Quadrant A, analysed using the Typology of Online Responses (Sackville & Sherratt, 2006), is shown in Figure 8.3:

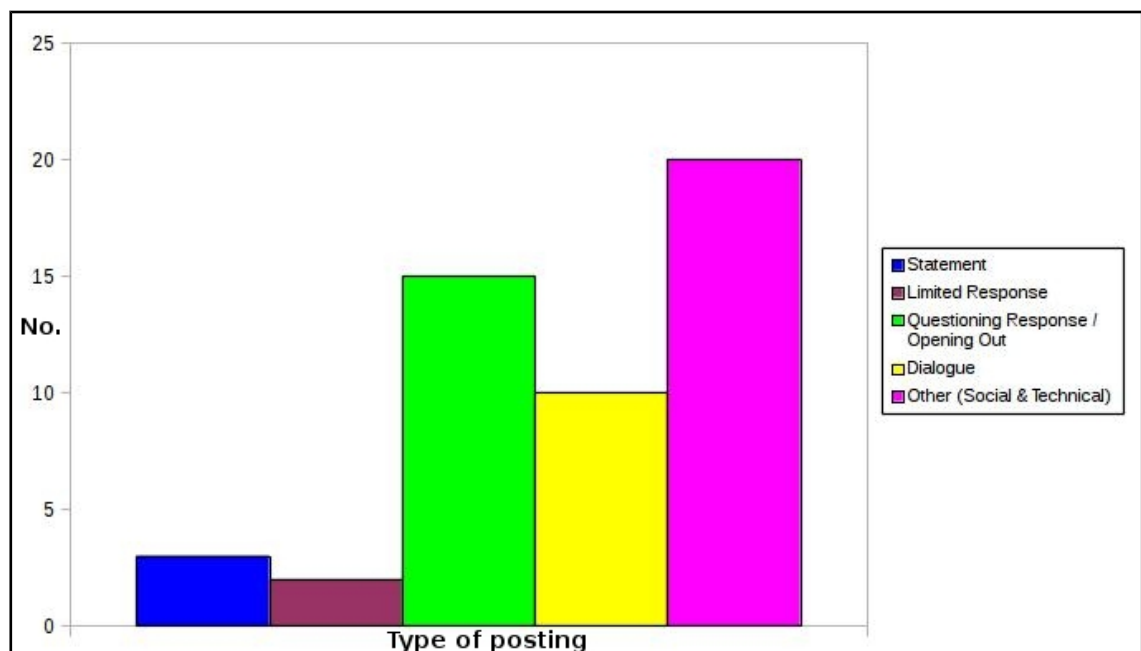


Figure 8. 3: Exemplar discussion board profile for a student in Quadrant A, analysed using the Typology of Online Responses (Sackville & Sherratt, 2006, Sherratt & Sackville, 2006a)

CHAPTER 8: CONVERGENCE & THEORY GENERATION

It can be seen from Figure 8.3 that this is not only an active and interactive discussant (both academically and socially), but one who also favours a Questioning posting style according to the Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a), which invites others to contribute and opens up the dialogue.

This student was also responsible for 47% of the student Community of Inquiry Teaching Presence contributions for his group (Garrison & Anderson, 2003), indicative of being a Peer Facilitator, and he was also highly active in contributing to all other indicators of CoI Cognitive Presence and CoI Social Presence, with Social Network Analysis indicating interaction both towards and from all members of the group.

It is apposite to consider here that Brookfield and Preskill (2005:6) define discussion as “*an alternately serious and playful effort by a group of two or more to share views and engage in mutual and reciprocal critique*”, which indeed seems highly reminiscent of what we find in Quadrant A. It should be noted that all of these students passed, and many achieved excellent grades, suggesting that they had indeed achieved deep learning and critical thinking – even without extensive tutor intervention.

This is, however, in direct contradiction of the ideas of Garrison and Cleveland-Innes (2005), who proposed that online interaction must go hand-in-hand with active ‘*leadership*’ in order to create a meaningful learning experience [see Sections 2.2b and 2.2c], with the clear expectation that this leadership and facilitation comes from a tutor, rather than from the students themselves.

8.2b Quadrant B

Meanwhile, the students characterised to Quadrant B come from the Basic Theme ‘**stimulating/challenging**’ [Section 6.14a]. These students also tended to be active discussants, and their seeking of tutor intervention was to further extend the online discourse achieved. Furthermore, they also seem to embrace the idea of all working together in a collaborative group, reflecting a strong link with many of the themes identified in Thematic Network 2 [see especially Section 6.7a ‘Collaboration & Sense of Community’ and Section 6.7d ‘Peer Facilitation’]. Students from Quadrant B are typified by the following comments:

“Personally I found it more useful when there was some involvement from the tutors ... something like a question, ‘what do you think about this?’ kind of thing. I think personally I responded quite well to that small input from a tutor”

(Interview: Participant 15)

CHAPTER 8: CONVERGENCE & THEORY GENERATION

“I’m not very good at critically appraising things, so sometimes I need someone to just sort of tease it out a bit more, and say ‘what do you mean by that?’”

(Interview: Participant 18)

The need of students in Quadrant B for tutor intervention to further stimulate both debate and learning resonates with Celentin's (2007) suggestion that:

“tutors ought to move the postings of the learners towards higher levels of critical thinking, enhancing, in this way, the building on other people's postings and/or asking for resolutions”.

(Celentin, 2007:55)

A discussion board activity profile for an exemplar student in Quadrant B is shown in Figure 8.4, below:

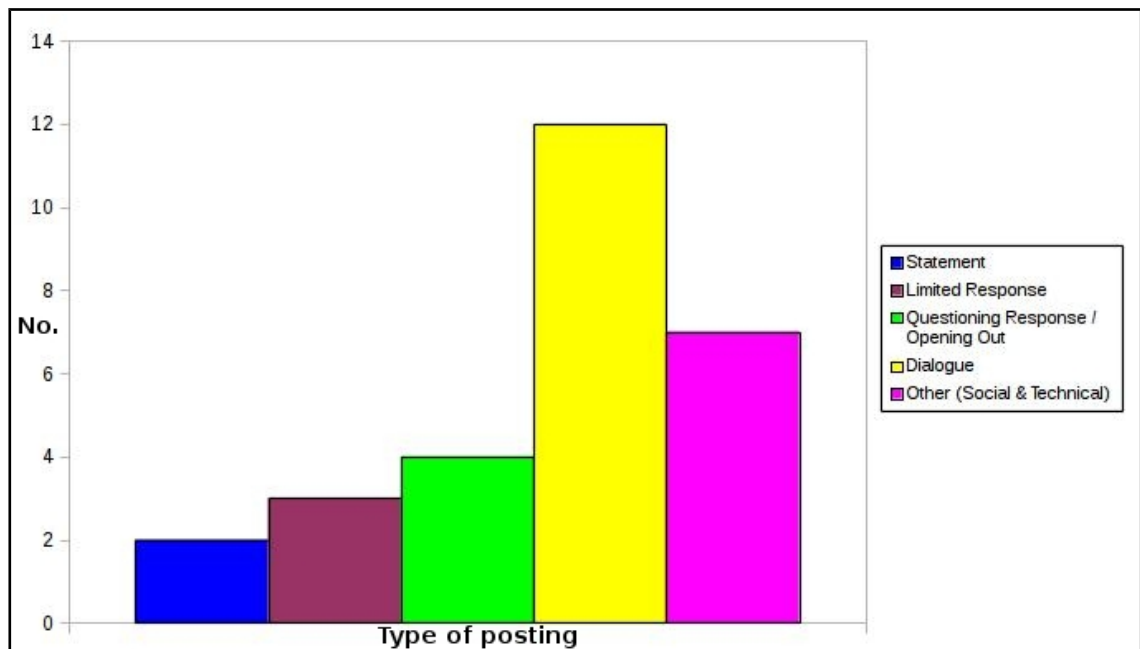


Figure 8. 4: Exemplar discussion board profile for a student in Quadrant B, analysed using the Typology of Online Responses (Sackville & Sherratt, 2006, Sherratt & Sackville, 2006a)

We can see from this profile that this is an active and interactive discussant, favouring Dialogue as their major posting style. He also contributed substantially to all CoI Cognitive Presence and CoI Social Presence indicators, with Social Network Analysis again indicating high levels of interaction with all members of the group. However, this student tended to answer questions rather than ask them, thus contributing less to the group's achievement of CoI Teaching Presence (14%).

8.2c Quadrant C

Quadrant C represents those students who are more strategic in their approach to online

CHAPTER 8: CONVERGENCE & THEORY GENERATION

discussion, perhaps not truly valuing the potential learning opportunity offered by an online discussion board. As noted above, these students came from Basic Theme '**individual contact/support**' [Section 6.15b], and they did not focus their energies on collaborative group-work, preferring to devote their time to completing the course assignments and working individually. The following student comments explain this viewpoint:-

"I think the big thing for me was Personal Tutor contact time, around the assignments"
(Interview: Participant 17)

"I like to work at my own pace, and I don't like to be pushed into either going slower or quicker by other people - I just like to do my own thing" (Interview: Participant 11)

A discussion board activity profile for an exemplar student located in Quadrant C is shown in Figure 8.5, below, which clearly shows that this student favoured the Statement as their preferred posting style, and posted the bare minimum of times in order to satisfy course requirements.

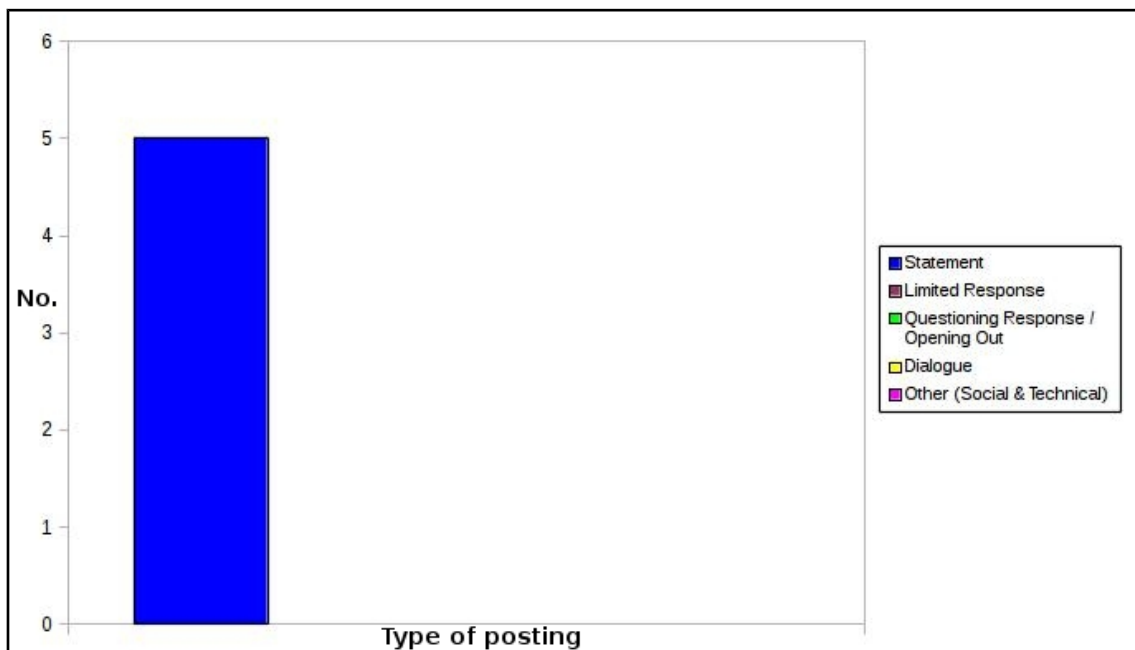


Figure 8. 5: Exemplar discussion board profile for a student in Quadrant C, analysed using the Typology of Online Responses (Sackville & Sherratt, 2006, Sherratt & Sackville, 2006a)

Thus, it is readily apparent that this student was posting purely to conform to the course requirements, not engaging in discussion with other students or with the tutor within the online discussion board. Indeed, had there been no fixed requirements to engage with discussion activities, then it is likely that this student would have been entirely absent from the “*distraction*” of the discussion board [as noted in Section 6.15b].

Furthermore, this student made minimal, low-level CoI Cognitive Presence contributions, such as exchanging information but not brainstorming or offering solutions, also minimal, very low-level CoI Social Presence contributions, such as threading responses to the pre-set activities but not actually referring to other people's postings, and no CoI Teaching Presence contribution at all; while Social Network Analysis demonstrates contact coming to this individual from others, but no response made in return.

8.2d Quadrant D

And finally, it can be seen that those students located in Quadrant D all came from the Basic Theme '**reassurance/ expertise**' [Section 6.14b]. These students were not very active discussants, although clearly willing to engage beyond the minimum requirement for the course. They also tended to commence posting somewhat later than other colleagues, possibly reflecting their lack of confidence and expressed need for specific tutor support and guidance, in order to allow them to take part in online discussion. Typical responses from students in this group are as follows:-

"I like to have tutor contact so if I don't understand things or misinterpret them I can seek advice"
(Student discussion posting, Learning Set C)

"It's like leading a horse to water - OK you can't make it drink, and adult learners do have to take responsibility for themselves, but the tutor's role should be to get you to the water."
(Interview: Participant 4)

"its difficult to know if we are talking about the right things here or are we making sense, or is this the right way"
(Interview: Participant 12)

Interestingly, and in distinct contrast to Quadrant A, this expectation of tutor guidance from the students in Quadrant D does indeed resonate strongly with the need for active tutor intervention and leadership, posited by Garrison and Cleveland-Innes (2005), and discussed above.

A discussion board activity profile for a student located in Quadrant D [Figure 8.6, overleaf] shows that this student made fewer postings overall, but was nevertheless willing to engage, with evidence of interaction both with students and tutors. Social Network Analysis indicates that this student had some interaction both towards and from fellow students, although she had a greater amount of interaction with the tutor. This student was not highly active, but did post more than the minimum course requirement. She clearly preferred to reply to questions from others, most frequently by means of the Limited Response, and made just a single CoI Teaching

Presence contribution, although there was some evidence of both CoI Cognitive Presence and CoI Social Presence. Thus, it can be seen that this type of student has potential to develop, but is not, as yet, fully active in her engagement with the online discussion board.

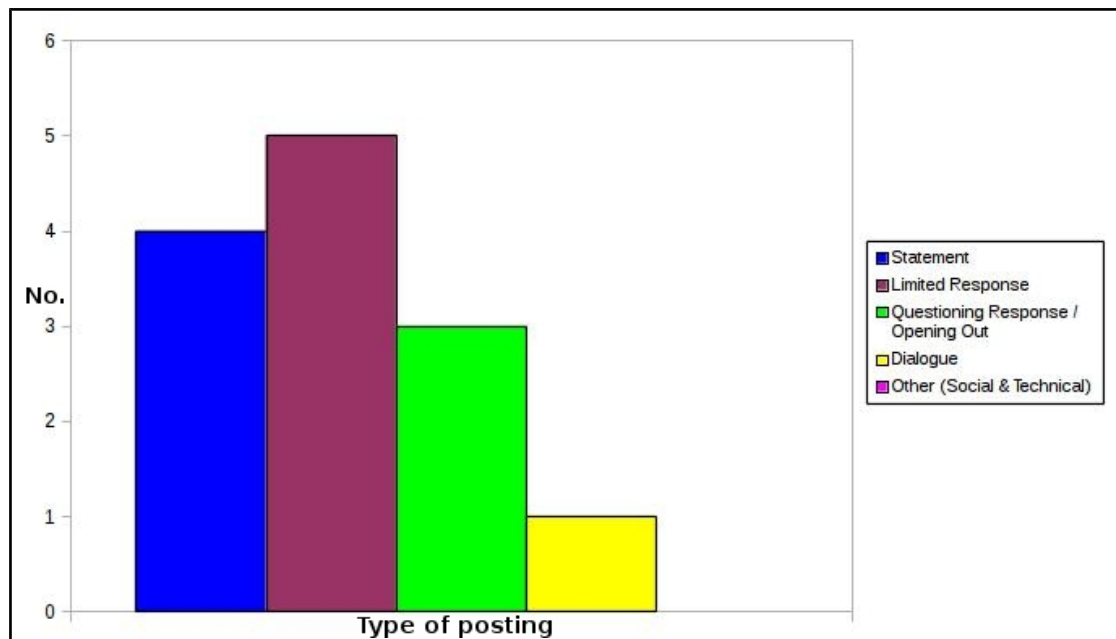


Figure 8. 6: Exemplar discussion board profile for a student in Quadrant D, analysed using the Typology of Online Responses (Sackville & Sherratt, 2006, Sherratt & Sackville, 2006a)

8.2e Comparison of Quadrant Model with Other Work

In considering this quadrant model (Sherratt, 2008a, 2012), a partial resonance can be seen with the 'Taxonomy of Participation in Online Courses' devised by Bento and colleagues (2005:81), which characterises students' participation variously as "*Social Participants*" (who are highly interactive with each other, but no interaction with course content), "*Active Learners*" (showing high levels of interaction with both each other and content), "*Witness Learners*" (who demonstrate high levels of interaction with content, but not with each other), and "*Missing in Action*" (who have low levels of interaction with course content and also low levels of interpersonal interaction).

However, whilst this work also characterises students into a quadrant diagram, and clearly also distinguishes the active from less active participants, I would suggest that there is only limited further resonance, since our focus is different, with Bento and colleagues (op.cit.) seeking a macro-level model of students' complete engagement with a course, as compared to my micro-level model of students' need for tutor support and intervention, specifically within the context of an online discussion board.

CHAPTER 8: CONVERGENCE & THEORY GENERATION

Bento and colleagues (op.cit.) do make a useful distinction between social and academic interaction, which also clearly resonates with both the Community of Inquiry (Garrison & Anderson, 2003) and the Typology of Online Responses (Sackville & Sherratt, 2006), as well as with the later proposition of Bliss and Lawrence (2009). However, there is no suggestion in my study that any students maintained social interaction without also engaging with the academic content of the course - as evidenced, for example, by Learning Set B consistently attaining CoI Cognitive Presence and Teaching Presence as well as substantial levels of Social Presence [see Section 5.4a], and so the type of interaction is not a defining feature of any of the Quadrants in my model (Sherratt, 2012). Thus, it can be seen that the category "*Social Participants*" (Bento et al, op.cit.) has no direct equivalence in my model, whilst the category "*Active Learners*" encompasses both Quadrants A and B [Figure 8.2].

Bento and colleagues (op.cit.) also consider differing types of non-participation, which is very helpful from the point of view of the tutor, deciding when and how to intervene; and although not a perfect fit, their description of "*Witness Learners*" who "*may feel hesitant to contribute*" (Bento et al, 2005:82) could be seen as a more extreme example of the diffident yet participating student in Quadrant D [Figure 8.2]. Meanwhile, there is also some resonance, but not a total correspondence between the students characterised by Bento and colleagues (ibid.) as "*Missing in Action*" and Quadrant C [Figure 8.2]. In both cases, these students have no desire to engage in online discussion, interaction with others, or any form of community; but whereas the "*Missing in Action*" student is also shown as having low engagement with the course content, there is no such assumption about the students in Quadrant C.

Another model that is interesting to compare is Yeh's (2010) quadrant model of classifications for 'online learning communities' which are similarly described as "*active collaboration, passive collaboration, individualized participation, and indifference*" (Yeh, 2010:150). Again, some, but not all, of these four classifications seem to resonate well with quadrants of my model [Figure 8.2], with differences perhaps explained by the focus of that work on community rather than specifically on the need for tutor intervention.

Thus, '*indifference*' is described by Yeh (op.cit.) as 'low participation and low collaboration', and this also seems to resonate fairly well with the actions of students characterised to Quadrant C, whose discussion board contributions were motivated by the need to meet the fixed requirements of the course. Similarly, 'active collaboration' seems to correspond well to the active discussants located in Quadrant B, while 'passive collaboration' could perhaps be seen as reflecting those more timid but still willing participants, from Quadrant D. However, where the

resonance fails to work fully is in Quadrant A. According to Yeh's (op.cit.) classification, these students should represent '*individualised participation*', which is highly active but with no collaboration. However, it is clear from earlier analysis that the students in Quadrant A are highly collaborative as well as highly active, seeking to run the online discussions as a student-led activity. Thus, although there is a good level of correspondence, there are also some key differences between Yeh's work (op.cit.) and the findings here.

In further considering the aspect of engagement and membership of a community, it is also useful to consider what we have termed 'peer facilitators' clearly located in Quadrant A of Figure 8.2 [above], and to a lesser extent, also in Quadrant B. Thus, it might be suggested that these two quadrants are where we will find conditions most likely to support the emergence of a learning community.

One might further speculate that if a group contains a majority of individuals characterised to Quadrants C or D [Figure 8.2], then the development of a learning community would be much more of a challenge, and slower to develop, due to the diffident interactions of participants. Therefore, this may help to explain the substantial differences in online behaviour between the four Learning Sets, identified in Sections 5.2a and 5.3a, whereby one group was highly active, interactive with each other and well-engaged in discussion; two groups were moderately active and interactive, and showed some evidence of dialogue; while one group was relatively inactive, showed less evidence of interaction, and on occasion completely failed to achieve dialogue.

8.3 Dynamic Model - Snapshot in Time

It was identified earlier that some students may have changed their online behaviour and beliefs during the course of their year's study, as they gained experience and confidence [Section 6.8 'Students' Experience of Change During the Course']. This can be accommodated by the emerging theoretical model presented above [Figure 8.2] if we also accept a concomitant move from one quadrant to another during the year (for example, from Quadrant D into Quadrant B). It appears, therefore, that the model presented in Figure 8.2 (above) must be seen as dynamic – that is to say, students' positioning within a particular quadrant may not reflect a permanent quality for each individual, but rather a situated response. Students will thus locate in different quadrants depending on their specific experiences and needs at any given time. This can be illustrated by the following comments:

CHAPTER 8: CONVERGENCE & THEORY GENERATION

“In module 2 we all felt a little bit more comfortable using it and a little bit more happy to write our thoughts down”
(Interview: Participant 3)

“in the third module, I felt my dialogue was better than during my 1st module”
(Interview: Participant 31)

“Going back to the first module, I was still a bit hesitant, for no reason whatsoever. I think it was, 'I'll see what people think first', and I think that's all it was”.
(Interview: Participant 12)

“[there were] quite dominant characters within our Group to begin with, but then I didn't worry about that so much as I progressed through the course and became more confident with the Discussion Board. I think that was just the initial module for me – it was sort of wow!”
(Interview: Participant 17)

It is likely that such a move can also explain some apparent contradictions in the students' beliefs and experiences. For example, in Module 3, the following student seems to have started off expressing Quadrant B beliefs, but was moved to act in a more strategic Quadrant C approach, when faced with the reality of significant time constraints at the end of the course:-

“Hi everybody, So nice to see our tutor on the ball, like the rest of us.”
(Student discussion posting, Module 3)

“I was one of the people that were wingeing about not too much tutor supervision and interaction in the first module or second module, but then when [Tutor] became our tutor, and they were trying to make us look into some articles and activities, I think my response was a little bit on the negative side ... its just extra work, extra work”
(Interview: Participant 9)

Another example of students changing to a different area of the Quadrant model can be seen during the final period of each module, when they were all writing their summatively assessed module assignments. At this point, even those participants who had been previously categorised as ‘Quadrant A’ tended to adopt a much more strategic Quadrant C-like mentality, as they focused on seeking individual feedback on draft work rather than on shared learning. Reference to the time-line of the Discussion Board archive shows that there were far fewer postings during this period, and where any were made, they tended to be purely social or supportive in nature, rather than exhibiting any academic content. This change was recognised by students, for example:-

“When we were writing our module essays, there wasn't much going on with the Discussion Board, just a token gesture”
(Interview: Participant 18)

Thus, it appears that the emerging model [Figure 8.2], not only accommodates, but potentially also accounts for the differences of opinion identified earlier, regarding the students' perception of the tutor role [Section 6.12b], and whether or not the tutor should play an active part in the online discussions.

The model helps to explain different students' attitudes towards peer facilitation input by fellow students [Section 6.7d] depending on their expectation of tutor input, so some saw peer facilitation as admirable (*eg*: Quadrant A), whilst others viewed it as an annoying overstepping of the student role. Finally, the differences between Quadrant behaviours and support needs can explain the widely differing evidence of community development and students' sense of community [Section 6.7a], depending on the extent to which the students were tutor-focused.

Since students can change their online behaviour and move between areas of the Quadrant model, the prospect also arises that, by tailoring their interventions appropriately, it may be possible for tutors to facilitate or even engineer such a move from one Quadrant to another, thereby optimising the learning experience according to social constructivist principles (Garrison, 2011b).

8.4 Integration of Tutor Behaviour and Beliefs with the Emerging Theoretical Model

Tutor interview responses from Thematic Network 8 (supported strongly by practice insights from Thematic Network 7) can also be readily overlaid onto the model of students' needs for intervention identified earlier [Figure 8.2], thereby offering an affirmation of the model's validity within the course, and also identifying how tutors might best support which type of students. Thematic Network 8 is discussed in Section 7.10, and summarised in Table 8.2, below:

THEMATIC NETWORK 8		
Global Theme	Organising Theme	Basic Theme
Tutors' Understanding of Students' Differing Needs for Tutor Intervention	Seeking Active Tutor Intervention in Online Discussion	Stimulating / Challenging
		Reassurance / Expertise
	Not Seeking Active Tutor Intervention in Online Discussion	Interference
		Individual Contact / Support

Table 8. 2: Thematic Network 8: Tutors' Understanding of Students' Need for Tutor Intervention

CHAPTER 8: CONVERGENCE & THEORY GENERATION

Emergent themes from the tutor interviews, presented in Thematic Network 8, along with supplementary evidence from Thematic Network 7 [Section 7.9], have been overlaid onto the model presented in Figure 8.2. This overlay is shown graphically in Figure 8.7:-

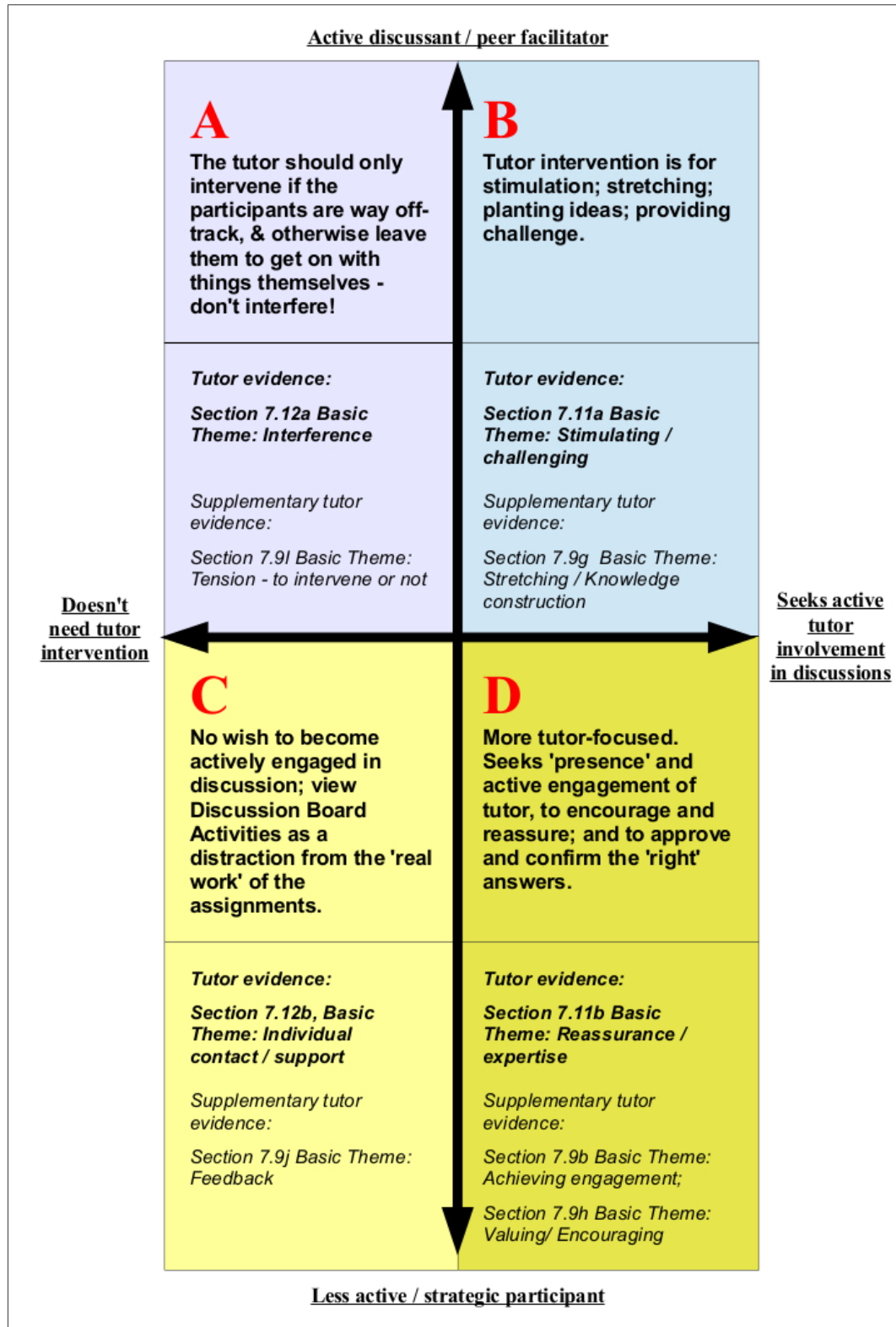


Figure 8.7: Overlay of Tutor Themes with Model of Students' Expressed Needs for Tutor Support & Intervention (Sherratt, 2012)

8.4a Profiling Tutor Behaviours

We can see evidence of underpinning beliefs that match Quadrant A in the following tutor comment:

“I would prefer it to come from the student participant than for me to say, 'have you thought about?' or 'I don't agree with this' and I would prefer that they did it”
(Interview: Tutor 4)

This viewpoint is further evidenced by actual practice, since it is clear from the discussion board archive that this tutor demonstrated a low posting level in Module 1 (only 6 in total), with no use of vocatives [Section 5.2c]; no deployment of Socratic interventions (Blignaut & Trollip, 2003a) [Section 5.5]; and no Dialogue (Sackville & Sherratt, 2006) [Section 5.3c]. All of these indicators confirm the adoption of a 'hands off' approach to the tutor role during Module 1, consistent with Quadrant A.

In contrast, the following tutor comment indicates a belief and approach that matches the more active needs of students in Quadrant B:

“Another function that I sometimes adopt is to challenge & stretch the students - to ask questions that might extend the discussion”
(Interview: Tutor 5)

From the discussion board archive, it can be seen that this tutor's practice also matched Quadrant B students' needs for intervention, being an active participant in discussion in Modules 2 and 3 (31 and 41 postings respectively), with substantial use of vocatives, salutations and valedictions throughout [Section 5.2c]; the highest levels of Socratic intervention from any tutor [Section 5.5]; and also the highest levels of both Questioning Response and Dialogue from any tutor [Section 5.3c]. This tutor behaviour is in keeping with the stimulation and highly active, challenging discussions needed by students in Quadrant B.

Meanwhile, a tutor response that indicates an awareness of students located in Quadrant C is as follows:

“if somebody doesn't want to go on the discussion board, how you make them, and that's the bottom line isn't it? ... so all you can do is, if they don't want to talk to anyone else, get them to email you privately, or if they are really, reluctant, then ring me! I will always say to a student please ring me and we will discuss this”
(Interview: Tutor 3)

In practice, this tutor maintained an overall low level of discussion board interventions (5 in Module 1, 5 in Module 2, and 6 in Module 3) [Section 5.2c], suited to a much less active group, as found in Quadrant C. This was coupled with deployment of both Affective and Socratic interventions [Section 5.5] and a clear preference for the Questioning Response [Section 5.3c], all of which can be seen as designed to offer encouragement and persuasion to these less engaged students.

Finally, an awareness of students exhibiting Quadrant D behaviour is captured by the following comment:

“some of them force you into a role of being ‘The tutor’ and the repository of all knowledge and all wisdom, which is a very sort of traditional attitude for some people to take”
(Interview: Tutor 2)

Overall, we can see from the discussion board that Tutor 2 was quite active in Modules 1 and 3, where her behaviour seemingly matches Quadrant D, (although she changed her tutor style to Quadrant A for Module 2, as discussed in Section 5.4b), and made regular use of salutations, valedictions and vocatives [Section 5.2c]. We can also see that in Modules 1 and 3, this tutor favoured a mix of Informative and Affective interventions [Section 5.5], consistent with information-giving and encouragement for the more diffident students typified into Quadrant D. This is further supported by her use of both Limited Response and Questioning Response interventions [Section 5.3c], which again indicate a mix of encouragement and instruction.

8.5 Individual and Group Profiles

The challenge that now arises is how tutors can identify which groups and individuals will fall into which sector of the diagram shown in Figure 8.2, so that their practice as online tutors can be tailored to best support each student's learning needs. It is important to understand that the Quadrant model can be applied both at the macro-level of whole groups, and also at the micro-level of the individual student. Given the variations in participation noted above [Section 8.1], I would suggest that both of these levels of analysis should be applied, in order to assist the online tutor to meet the learning needs of all students, some of whom may not conform to the overall style of the group.

For example, we saw in Section 5.4b that Tutor 2 made a judgement that Learning Set B did not need tutor intervention in online discussions during Module 2, thus locating them, as a whole group, into Quadrant A. It was clear that this Learning Set successfully maintained both CoI

CHAPTER 8: CONVERGENCE & THEORY GENERATION

'Teaching Presence' [see Table 5.16] and Sackville & Sherratt 'Dialogue' [see Table 5.12] throughout that module, due to the actions of peer facilitators. From the individual student interviews [Chapter 6], it can be seen that some students in this Learning Set responded very well to peer facilitation rather than tutor intervention, for example:

"The purpose of the online discussion activities is peer support ... I think it's about your own learning and supporting others to learn" (Interview: Participant 13)

"within our little tutorial group there was myself, Jane and Martin who decided we were going to take an active role in deliberately replying to anybody who came on. We'd deliberately go out and try to reply to their posts, to try and get the discussion board going – which I think was relatively successful" (Interview: Participant 10)

"I did try to respond to as many different people as I could, just to encourage them, specially if it was somebody who hadn't had a lot of input, or hadn't had a response to, then I tried to top it up, to give them a bit of encouragement, as much as anything, just to keep the discussion going" (Interview: Participant 16)

These are active participants who match the group profile, locating in Quadrant A. However, from the views expressed in interview, it can also be seen that some members of Learning Set B were individually identified with Quadrants B or D, and thus they found the total reliance on peer facilitators less satisfactory, seeking guiding or challenging input from tutors. For example:

"I think the one where the tutor had a little bit more input, the group responded very well, and the discussions that ensued seemed to be much richer and much more thoughtful, and more people were inputting to them". (Interview: Participant 15)

"the tutor knows what's in the course, and what will benefit and what will waste the students' time; whereas the people who are taking part in the discussion – they're just like me" (Interview: Participant 9)

"[I wanted] a bit more reassurance from the tutors, or guide a bit more - not much, but a bit more!" (Interview: Participant 12)

Interestingly, when reflecting back on her experience, Tutor 2 had the insight to recognise this diversity, commenting:

"I think it's a mistake to see them all as a group, because within one group you can see at least three different groups" (Interview: Tutor 2)

A further example of dissonance between individual and group profiles can be seen in Learning Set C, which had a moderately active posting profile overall, including some achievement of Dialogue, but with both quantity and discourse provided by only 4 students [Section 5.3b].

CHAPTER 8: CONVERGENCE & THEORY GENERATION

These 4 students can be seen to be not only active but also self-directed, profiling to Quadrant A, for example:

“Could I play devils advocate and suggest that Tutor input not absolutely essential?”
(Student discussion posting, Learning Set C)

“I agree that we are using the discussion board effectively already without being steered by a tutor”
(Student discussion posting, Learning Set C)

However, other students within this group were considerably less active and also less confident, profiling instead to Quadrants C and D, for example:

“[Tutors should] guide you and offer you support and advice; if you are off on the wrong track, put you back onto the right one; pass on their own knowledge about things”
(Interview: Participant 25)

“I occasionally would like a little more instant tutor feedback which I'd get on the routine study days or tutorials approach where the tutor is there to instantly guide you or clarify if you're right or wrong ... I think I am capable of seeking clarification where necessary but maybe sometimes I might want a bit more input”
(Student discussion posting, Learning Set C)

“my motivation for being on that board was not because what people said was particularly interesting ... my motivations for posting were because I had to post, rather than because I wanted them to know what I thought”
(Interview: Participant 19)

As noted in Section 5.6, this gave rise to a somewhat uncomfortable (and potentially dysfunctional) group, with some fairly active members seeking to create a student-led learning experience, whilst other members of the group were considerably less engaged.

Whereas the individual members of Learning Set A can be seen to have a consistent profile that matched their more diffident (Quadrant D) group style, depending to a much greater extent on the tutor for provision of CoI Teaching Presence (69-88%), especially for the 'Facilitating Discourse' element (76-100%) [see Table 5.15], and also maintaining a much lower rate of postings overall than other Learning Sets [see Table 5.5]. This point was acknowledged in interview by the following student comments:

“I was in a Group of like-minded people who were also not that good at committing words in that format for a Discussion Board”
(Interview: Participant 1)

CHAPTER 8: CONVERGENCE & THEORY GENERATION

“[The tutor's role is] to actively encourage participation, to respond to comments made by the group – to show that the comments are being noted/thought about, to cajole those who appear to be left behind.” (Interview: Participant 6)

This need for active tutor intervention and leadership is also demonstrated by discussion board comments, as follows:

“Hi [Tutor] Thank you for letting us know of your availability. Would you be giving feedback to the activity I please?” (Student discussion posting, Learning Set A)

“I find it helpful for [Tutor] to interject and show interest to keep some prompting and questioning going” (Student discussion posting, Learning Set A)

Further evidence of this group's need for active tutor intervention can be observed in the lack of achievement of Dialogue (Sackville & Sherratt, 2006) when this group was paired with a less active tutor, who did not post at all for the first month of Module 3 [noted in Section 5.3]. This is illustrated by the following comments:

“I thought the tutors would be much more part of driving the questioning, and set interventions at certain times. I suppose they were more participant led as opposed to tutor led” (Interview: Participant 7)

“In module 2 we all felt a little bit more comfortable ... and a little bit more happy to write our thoughts down, and then module 3 wandered into nothing” (Interview: Participant 3)

Thus, it appears that a relationship between the type of interaction and the level of tutor intervention can be discerned. As noted in Section 5.3a, this group had what might be classed as a moderately active facilitator in Module 1, and they achieved some Dialogue (Sackville & Sherratt, 2006). When they had a more active facilitator in Module 2, they achieved a greater amount of Dialogue; but where they were supported by a 'hands off' Tutor, in Module 3, they regressed to a very Statement-oriented style of posting and did not achieve Dialogue. These students also found their learning experience much more satisfying when supported by an active tutor, who matched their needs. This is illustrated by the student interview comment: *“module 2 was the best one in discussion”* (Participant 3). This also resonates with the findings of Mazzolini and Maddison (2003a) that students feel greater levels of satisfaction when working with an active tutor, even though it does not result in an increased number of postings.

8.6 Identifying profiles for individuals and groups

It has already been noted from tutor interviews [Chapter 7] that the tutors were aware that student needs and engagement styles differed, although these differences were not clearly defined. Furthermore, evidence from student interviews in Chapter 6 indicates that tutors were not always picking up cues and identifying these differences in practice, nor delivering the most tailored support suited to the needs of all individual students, leading to mixed levels of overall satisfaction as regards the tutor role. Thus, it becomes clear that even highly experienced online tutors can potentially benefit greatly from an active awareness of a structured model such as the one presented in Figure 8.2, and an associated set of diagnostic tools that can help in the task of identifying where students are currently located within the Quadrant Model.

8.6a Indicators of location within the Quadrant Model

In order to identify where individual students are located within the Quadrant Model [Figure 8.2], tutors will need to utilise a range of tools. When comparing the exemplar profiles discussed above [Sections 8.2a – 8.2d], it becomes apparent that students can be profiled to their individual Quadrant location, by an application of the *'learning analytics'* available within the VLE, coupled with some of the qualitative taxonomies that have been utilised to analyse the data for this study: Community of Inquiry (CoI) (Garrison & Anderson, 2003), the Sackville and Sherratt Typology of Online Responses (Sackville & Sherratt, 2006), and Social Network Analysis (Dawson, 2010). None of these can be carried out in advance of the course commencing, but from consideration of the discussion board time-line from this study, I would suggest that a good preliminary insight into students' online behaviour can be gained within the first two to three weeks of course engagement. Although students' location within the Quadrant Model (and their associated support and intervention needs) may change, nevertheless, this insight can assist the tutor to establish a 'baseline' of needs for support and intervention, and also to plan their initial intervention style.

The first thing to consider is the number of postings made by the student, since differentiating between active and less active discussants reflects the extremes of the Y axis of the Quadrant Model [Figure 8.2]. **Active engagement** in discussion activities is indicative of Quadrants A and B, whereas a lower level of engagement in discussion activities indicates Quadrants C and D.

8.6b Distinguishing Between Quadrants A and B

Having identified active discussants, the next point to consider is the type of postings made, drawing on the Sackville and Sherratt Typology of Online Responses (Sackville & Sherratt, 2006; Sherratt & Sackville, 2006a). A preference for the **Questioning Response** is indicative of Quadrant A, whereas Quadrant B is more likely to achieve high levels of **Dialogue**, although possibly commencing with the **Limited Response**, depending on their level of experience. It should be noted that Dialogue may also be found in Quadrant A, but Questioning does not feature as a major element of the Quadrant B student's repertoire, so this is an important indicator.

Students from both Quadrants A and B can also be seen to interact with many other students, and to be **student-facing** in their postings rather than tutor-focused. However, the Quadrant A student is also characterised by **initiating interaction**, and so this is a further indicator to help distinguish between Quadrants A and B, since we have identified earlier that Quadrant B students are highly active discussants, but mostly look to the tutor for challenge and stimulation. However, the Quadrant B students' tendency to reply to others helps develop dialogue within the group as a whole.

The Quadrant A student can also be seen most often to take on the role of **Peer Facilitator**, especially at the start of a course, and to contribute substantially towards the group's achievement of **CoI Teaching Presence** [see Section 8.2a], and so this is a further diagnostic test that the tutor can carry out.

8.6c Distinguishing between Quadrants C and D

Where the tutor can see evidence of a **low level of discussion board activity**, or even no activity at all, this is a strong indicator that students are located within Quadrants C and D. For students in Quadrant C, there may be no postings made early on in the course, and only ever the bare minimum to conform with course requirements (or none where engagement is voluntary); whereas Quadrant D students may be quite slow to start, but even though they can be classed as 'less active participants', they often post more than the course requires.

Where Quadrant C students do make postings, they will show a strong preference for the **Statement**, according to the Sackville and Sherratt (2006) Typology of Online Responses, since these students are merely conforming to external requirements and have no interest in

CHAPTER 8: CONVERGENCE & THEORY GENERATION

developing discussion. Thus, Quadrant C students can also be frequently seen making 'batch' postings to a number of activities all at once, which again indicates a lack of interest in engaging with the activities on an ongoing basis. On the other hand, students in Quadrant D may also make Statements, and (particularly if very nervous or uncertain) may also be quite late in starting their postings; but they can also manifest evidence of the **Limited Response**, and even a small amount of **Dialogue**, as they attempt to join in the debate.

Reference to the VLE analytic tools will show the extent to which these students are logging into the discussion boards. Quadrant D students will tend to log in and read all postings, since they value this medium, even though they may lack the confidence to take an active part themselves. Quadrant C students, however, are far less likely even to read the discussion postings, since the discussion board holds no relevance for them, and represents merely a “*distraction*” from their coursework.

Students in both Quadrants C and D may initiate email contact with tutors. The content of this correspondence can be used as a further indicator, to tease out the difference between seeking reassurance (Quadrant D), compared to a desire to engage the tutor in one-to-one debate, away from the group, and the provision of one-to-one support and feedback (Quadrant C).

The Quadrant C student can also be distinguished from Quadrant D by a dearth of indicators for **CoI Social Presence** and **CoI Social Presence**, and also by a lack of Social Network contact towards others, which is further evidenced by a marked lack of salutations and valedictions. Quadrant D students, on the other hand, will manifest a moderate amount of **CoI Social Presence** and **CoI Cognitive Presence**, with regular use of salutations and valedictions, and some Social Network interaction with other students and with tutors.

8.6d Summary of indicative student behaviours

The indicators of student location within the Quadrant Model can be summarised in a check-list for tutors, presented in Table 8.3 [overleaf]:

CHAPTER 8: CONVERGENCE & THEORY GENERATION

Taxonomy or Tool	Indicative Behaviours		Student Profile
VLE discussion board & analytics	High volume of postings		Quadrants A & B
	Low volume of postings or no postings		Quadrants C & D
	Reading discussion board postings		Quadrants A, B & D
	Not reading discussion board postings		Quadrant C
	Frequently initiates interaction		Quadrant A
	Does not or seldom initiates interaction but does reply		Quadrants B & D
	Does not initiate interaction and does not reply		Quadrant C
Sackville & Sherratt Typology of Online Responses	Preference for Questioning Response (some Dialogue)		Quadrant A
	Preference for Dialogue (notably very little or no Questioning Response)		Quadrant B
	Preference for Statement		Quadrant C
	Preference for Limited Response (some Dialogue)		Quadrant D
Community of Inquiry	Social Presence	High number of indicators	Quadrants A & B
		No or very low number of indicators, all low-level	Quadrant C
		Moderate number of indicators	Quadrant D
	Cognitive Presence	High number of indicators	Quadrants A & B
		No or very low number of indicators, all low-level	Quadrant C
		Moderate number of indicators	Quadrant D
	Teaching Presence	High number of indicators	Quadrant A
		Moderate number of indicators	Quadrant B
		No indicators	Quadrant C
		Small number of indicators	Quadrant D
Social Network Analysis	High level of interaction towards and from others		Quadrants A & B
	Low interaction, all coming from others and not towards others.		Quadrant C
	Some interaction towards and from other students; more interaction with tutors		Quadrant D

Table 8. 3: Check-list for tutors: summary of indicative student behaviours

8.7 Suggested Tutor Interventions

It is clear from the above discussion that the online tutor can be guided regarding the optimum response to different students' needs by referring to their Quadrant profile. The tutor's position as regards students in each quadrant is therefore summarised in Figure 8.8:

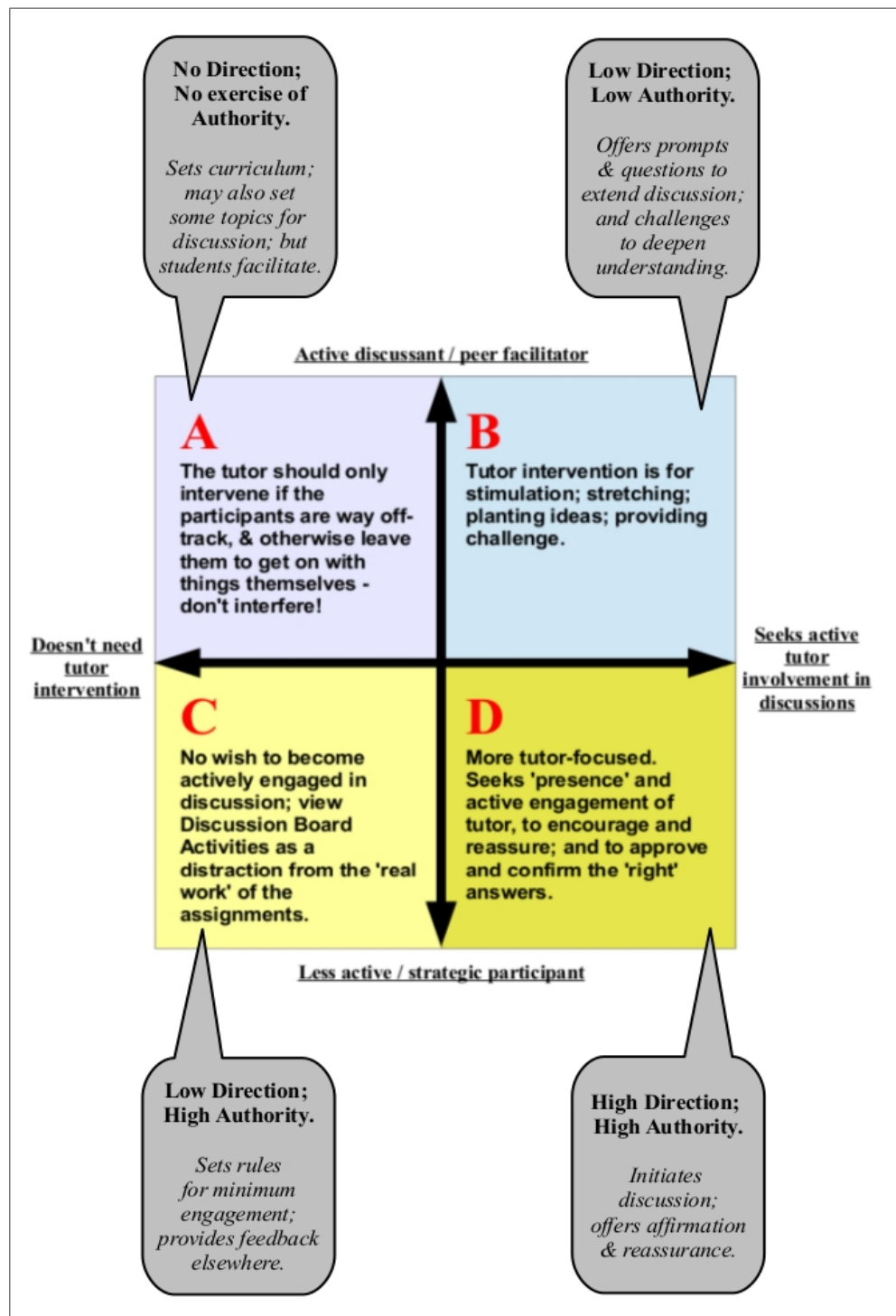


Figure 8. 8: Implications of Quadrant Model for Tutor Practice

Thus, it is proposed in Figure 8.8 that tutors for Quadrant A students will ideally not be at all directive, and will not exercise any authority; whilst tutors for Quadrant B students will offer a small amount of direction, in keeping with providing challenges to already active students, and will thus also exercise only a limited amount of authority within the course group. Tutors for Quadrant C students will be authoritative figures, giving individual contact, support and feedback outside of the discussion board – and hence they can also be seen as not directive within the discussion context; whereas tutors for Quadrant D students need to be much more directive, since these students depend on the tutor for guidance and leadership. These tutors will also need to be authoritative in style, in keeping with their role of expert.

8.7a Supporting Quadrant A

Students in Quadrant A are both active and self-directed, with no recognition of the authority of the tutor, and hence the ideal response is one in which there is no exercise of authority on the part of the tutor. Simple 'hands off' monitoring, as seen in the *"Ghost in the Wings"* approach to online facilitation (Mazzolini & Maddison, 2003a) would be a suitable way of supporting these students. If the tutor wants to maintain some connection, then she needs to show an indication of 'presence' which does not interrupt the 'flow' of dialogue or engage in the emerging argument. Thus, a suitable response would be a brief comment 'without academic content' (Blignaut & Trollip, 2003a), such as social or encouraging remarks [eg: *"I'm really enjoying reading these postings"*].

If the tutor for a Quadrant A group attempts to intervene with direct instruction or academic facilitation, then at best, she (or at least her authority) will simply be ignored by the students [as noted, for example, in Learning Set C, discussed in Sections 5.7a & 5.7b], and illustrated by the following comment:

"Did I respond to tutors postings? Its interesting, because I think I did, but you'd respond entirely on their merits and not because they're a tutor. You know, there'd be nothing special about the tutor's posting"
(Interview: Participant 10)

But there is also the danger that tutor intervention may interrupt the established flow of ideas and interactions between students, which could stifle the discussion and dissuade Quadrant A students from engaging in further dialogue [discussed, for example, in Sections 5.4a, 6.10e and 6.10f]. From analysis of the Discussion Board archive, it has been noted, in particular, that Learning Sets B and C achieved lower levels of Cognitive Presence in Module 3 [see Figures 5.9 and 5.10], and that this coincided with much higher levels of tutor presence, whereby 26%

of Social Presence and 63% of Teaching Presence came from the tutor in the case of Learning Set C, with 13% of Social Presence and 57% of Teaching Presence for Learning Set B. Thus, it seems that where a group can be largely characterised to Quadrant A, too much tutor posting can indeed have a detrimental effect on the development of discussion, and this is clearly in agreement with the notion of “*instructional equilibrium*” described by Shea and colleagues (2010a: 14), and discussed in Section 5.4b. This finding also resonates strongly with the work of Savvidou (2013) who also observed an inverse relationship between the number of tutor postings and student postings. Furthermore, this bears out the observation of An and colleagues (2009) that:

“when the instructor’s intervention was minimal, students tended to more freely express their thoughts and opinions”.
(An et al, 2009: 749)

Interestingly, this phenomenon can also be illustrated by comments from active 'peer facilitator' students, for example:-

“my personal feeling is that it’s a light hand on the tiller ... to encourage the group itself to try and work collaboratively, in a group way”
(Interview: Participant 10)

“in the 3rd module, I think I did everything that I should in the minimalist amount, but perhaps not as much in the third module as I had done in the first 2 modules ... I wonder if [more facilitator input] put some people off ... if you look at the third module, I think that there was less interaction ... I just wonder if that might have deterred some of the people who were bit slower from coming on board”
(Interview: Participant 24)

8.7b Supporting Quadrant B

Meanwhile, for students in Quadrant B, there is some acknowledgement of tutor authority, and the requisite need for some exercise of that authority on the part of the tutor. These students are active and quite self-directed, and thus not totally dependent on the tutor, but they do need a small amount of tutor input to offer additional challenges and to further stimulate debate. A suitable tutor response would be to start with simple social interaction (*ie*: no academic content); to monitor and wait until the argumentation is well established; and then to adopt a more Socratic intervention style (Blignaut & Trollip, 2003a), asking academic content-related questions to deepen or broaden the debate, by probing or hypothesising [*eg*: “*but what would happen if this was the case?*”]. An alternative approach would be to provide stimulation and challenge by introducing additional references and resources, that go beyond the main course content.

If the tutor of a Quadrant B group does not intervene, these students will be able to maintain a basic level of interaction, but they may feel dissatisfied with the level of argumentation achieved. It may also indicate a lost opportunity for enhanced learning, resonating strongly with the views posited by Garrison and colleagues (2001) and Garrison and Cleveland-Innes (2005), that learners left to their own devices may feel comfortable remaining in the earlier Exploration phase of CoI Cognitive Presence, requiring a Teaching Presence challenge to move them on to develop critical thinking. A student comment from the online Discussion Board [Section 5.7a] illustrates this perceived need:

“I agree that if we are to learn about these subjects some guidance from the tutor would be desirable. Would it not lead to a more informed discussion and a deeper learning?”
(Student discussion posting, Learning Set B)

8.7c Supporting Quadrant C

In contrast, the tutor is an authoritative figure for students in Quadrant C, although this authority is exercised outside of the Discussion Board, primarily by means of individual one-to-one feedback, which is the most suitable tutor response to support these students. For those students who have moved into this Quadrant following an early period of active posting in Quadrants A or B, the tutor does not need to intervene at all, but simply to accept that this is a different phase of the course, where students are working on their individually-assessed course-work and preparing for final summative examination. Thus, these students need only feedback from the tutor at this stage of their studies, along with availability for support in the event of a sudden crisis.

However, for those students who are located in Quadrant C from the beginning, the tutor needs to ascertain whether they are simply adopting a strategic approach to studying, in which case, the students have made an active and informed choice not to engage with discussion activities (perhaps due to time constraints, in the case of busy professionals such as Participant 9, noted in Section 8.2), or whether they are not engaging due to a lack of understanding regarding the opportunities offered by online discussion. During one-to-one contact with these students, in the early part of the course, the tutor will therefore find it helpful to explore the students' motivation, perhaps by gentle probing. Once contact is established, the tutor can explain, where necessary, how engaging with the online discussion board might be helpful, and offer encouragement to give it a try. A student comment typifies this need:

"I particularly like the fact that a tutor may say 'well we haven't heard from you' or 'what I want is'"
(Interview: Participant 19)

If the tutor of a Quadrant C group does not accept the need for one-to-one interaction, then all of these students will feel dissatisfied and let down. For those students who lack insight into the affordances of online discussion, an opportunity will be lost if the tutor does not explain and encourage engagement. This resonates with the views of Skinner (2007), who identified that students may not feel motivated to join in shared activity such as online discussion, when they have not yet seen the possible personal benefit, commenting:

"There are benefits to participation such as the building of social capital and personal development that may not be realised until people engage in community activities."
(Skinner 2007:10)

For these Quadrant C students, who do not yet see the value of online discussion, Skinner (ibid.) suggests the need for tutors to persuade these students to take part, so that they can experience the benefits of community activities, and hence, be converted to online learning.

It is notable that Skinner (ibid.) also suggests that some people may not wish to engage in online discussion due to lacking the confidence or skills for doing so. However, I would suggest that being unaware of the benefits of online discussion does not naturally or necessarily go together with the lack of confidence or skills, which serve as a barrier to engagement by themselves, regardless of the benefits that the student may (or may not) be able to see. This corresponds to Quadrant D, and I would suggest that these students need a different response from the tutor, in order to maximise their engagement and to achieve the best learning experience. Persuasion may still feature, but nurturing and encouraging, supporting and facilitating, would seem to be the actions most needed from the tutor, so that these individuals can gain confidence and start to flourish in the online forum.

8.7d Supporting Quadrant D

The tutor is also an authoritative figure for students in Quadrant D, who need frequent tutor intervention and direction, from an early stage in the course. The tutor needs firstly to offer affective support (Blignaut & Trollip, 2003a), to reassure the students of the appropriateness of their ideas and the relevance of their experiences. A possible second strand of action for the tutor would be to ask questions, in order to develop discussion and to elicit additional postings from shy individuals, perhaps using a vocative or an individual focus. For professional groups, this questioning could appeal to their professional identity and experience, in which they may

CHAPTER 8: CONVERGENCE & THEORY GENERATION

feel more secure [eg: “*Mary, how does that work in your speciality?*” or more subtly: “*how does this work in dentistry?*”]. By indicating that these students' experiences are interesting and important, the tutor can start to build their confidence, which will help them to move to a more active status (perhaps moving into Quadrant B). If this is then followed up with an invitation to other group members to respond to the shy students' postings, it will also assist with their integration into the group.

The presence of a Quadrant A-style peer facilitator within the overall Quadrant D group can ensure some ongoing level of activity. However, for Quadrant D students, the authority of the formally appointed tutor is significant, leading to greater reassurance and also greater levels of satisfaction with the course when the facilitative interventions come from the tutor, and, as noted above [Section 8.5], an associated lack of satisfaction when faced solely or largely with peer facilitation.

In the absence of a peer facilitator, if the tutor of a Quadrant D group does not intervene, or does not do so with sufficient frequency, the discussion board risks falling silent. It is important, however, that this more active tutor role should not end up dominating the discussion, for example by performing a set of one-to-one interrogations. It has already been remarked that tutor-focused groups and individuals did not seem to bond into learning communities with the same ease as student-focused groups and individuals - hence, the suggestion of questioning, followed by an 'opening out' intervention, to maintain student-focused and student-facing discussion, and to offer an open invitation to participate. This approach can be illustrated by the following comments:

“what I'm looking at is just sort of a guide, and the reassurance that you were doing fine. Sometimes you felt that you may well be completely wrong, and yet you just go on with the discussion and you don't know, so that kind of guide and reassurance, maybe its just me as a person, I need it”
(Interview: Participant 12)

“I agree with you [Tutor] that reflection needs to be guided ...”
(Student discussion posting, Learning Set A)

“Hi [Tutor], The main function of the portfolio is ...”
(Student discussion posting, Learning Set B)

Thus, I would suggest that online tutors should ideally consider utilising a range of different intervention approaches, in order to support the wide range of learners they may face.

8.7d Supporting communities

For the online tutor to be able to support students in developing and maintaining learning communities, whether designated as a 'Community of Inquiry' (CoI) (Garrison et al, 2000; Garrison & Anderson, 2003) or a 'Community of Practice' (CoP) (Lave & Wenger, 1991; Wenger, 1998; Wenger et al, 2002), it is apparent that the online tutor needs to ensure that students communicate, collaborate, and feel a mutual sense of belonging. Encouraging dialogue in the online discussion board is therefore an important early objective. For example, we noted earlier that Akyol and Garrison (2011a) have proposed that CoI Social Presence is a vital prerequisite to both Teaching Presence and Cognitive Presence, since students must feel comfortable with each other before they can question, challenge or co-construct knowledge. This equally resonates with work on other types of online community, such as the proposition of Thompson and MacDonald (2005: 244) that “*conversation is pivotal to interaction*”; and the more recent work of Abedin and colleagues (2014), who noted the importance of students feeling comfortable to make social postings, especially early on in the course, when the sense of community is still forming.

Thus, if the tutor can see that members of a group are engaging each other in conversation (Quadrants A and B), then it is highly likely that they will develop sufficient Social Presence to support the development of a community. The challenge for tutors comes with groups who are predominantly profiled to Quadrants C and D, since these groups will not naturally engage each other in conversation, which will inhibit the formation of any sense of community. It appears, therefore, that on-going monitoring of Indicative Student Behaviours [Table 8.3] is a feasible way of ensuring neither too little nor too much contact and intervention on the part of the tutor.

8.8 Summary

This chapter has demonstrated the integration of data and analyses from both the qualitative and quantitative elements of the study, and the generation of a new theoretical model to differentiate students' individual and group needs for tutor support and intervention in online discussions (Sherratt, 2012). Furthermore, to enhance the usefulness of this model, a potential set of profiling indicators have now been suggested, to assist online tutors in identifying where their students are located within the model, a task which can be carried out in real time, during a course. Some consideration of feasible tutor responses for students located in each Quadrant has also been offered. The extent to which this model is generalisable or transferable to other online or blended courses will be explored in the final chapter, along with consideration of the overall impact of the findings and recommendations for future work.

CHAPTER 9: IMPACT OF FINDINGS, GENERALISABILITY AND FUTURE WORK

This chapter will discuss the findings of this research study [presented in Chapter 8] in relation to the over-arching aims and underpinning questions for the research [outlined in Chapter 1], before drawing conclusions regarding the potential impact of this study for practitioners like myself, and also, potentially, in other contexts. I will also identify areas where additional research is warranted, including my own immediate plans to extend the research presented within this Thesis.

9.1 Overview of Research Questions

As noted in Section 1.2, the original over-arching objectives of this study were as follows:-

1. To examine the role and influence of tutors in the specific context of a postgraduate blended-learning programme in clinical education, with particular consideration of online discussion;
2. To explore students' experiences within this programme, with special consideration of the influence of tutors;
3. To consider the impact of the relationship between tutors and students within the e-learning context, with particular consideration of online discussion;
4. To identify ways in which tutors might enhance students' experience of e-learning, with particular consideration of online discussion;
5. To critically examine existing theory and evidence in relation to the role of tutors and their influence on learning, especially in blended and online programmes, and with particular consideration of online discussion; and to apply the findings of that research to this critical evaluation;
6. To draw conclusions that may have relevance to other e-learning and wider educational contexts.

I would suggest that these six objectives are all met by this study, and this can be demonstrated in the following ways: The first objective is clearly met by the whole study, as evidenced by this

CHAPTER 9: IMPACT, GENERALISABILITY & FUTURE WORK

entire Thesis, which does indeed examine the role and influence of tutors in the specific context of one particular postgraduate blended-learning programme in clinical education. The analysis presented herein has also placed particular emphasis on considering online discussion, such that the first objective for this study can be seen to have been fully met.

Meanwhile, the data and analysis presented in Chapter 5 [online discussion board] and Chapter 6 [student interviews] offer substantial evidence of the students' experience of participating in this programme, highlighting both the positive and less positive aspects of this experience, thus fulfilling objective 2. Furthermore, the emerging theoretical model, associated check-list of behavioural indicators and recommendations for tutor interventions can be clearly seen to meet objectives 3 and 4, since their focus is on how tutors can best meet the needs of students; whilst the review of extant literature presented in Chapter 2, coupled with the ongoing discussion of results in Chapters 5 - 8 in relation to other authors' findings, successfully answers objective 5. This leaves only the final objective, and so the extent to which the findings of this research may be applied to other e-learning and wider educational contexts will be discussed in Section 9.2, below.

In addition to the original set of study objectives, and as also noted in Section 1.2, the idea and intention of 'practitioner research' was at the heart of this enquiry, which was initially triggered by two personal challenges for my own practice as a tutor:

- a) *how I, as a practitioner, could extend my own practice into conscious, thoughtful praxis;*
- and
- b) *how I, as an online tutor, might contribute to achieving rich dialogue in the online discussion board and enhance the learning experience of my students.*

Happily, there is clear evidence that both of these initial drivers have also been satisfied by this study, most specifically, by allowing myself (and indeed other tutors) to consciously apply the check-list of indicative student behaviours [Table 8.3] associated with the theoretical quadrant model of students expressed need for tutor support and intervention [Figure 8.2], such that groups and individual students can be profiled into one of the four quadrants of the model, two of which [Quadrants B and D] identify students who have a distinct need for tutor support and intervention within the online discussion board, whilst the other two quadrants [Quadrants A and C] represent students who do not express a need for tutor intervention within the context of

CHAPTER 9: IMPACT, GENERALISABILITY & FUTURE WORK

online discussion. Once the profiling has been carried out, we can then deploy some of the suggested tutor interventions [discussed in Section 8.7], so as to match the provision of support to the students' specific needs.

However, in order to broaden the study beyond my own practice, such that it could have more general relevance, a set of detailed research questions and sub-questions was also developed, which warrant further consideration. These research questions have been articulated as follows [Section 1.2]:-

1. What might be the role and influence of tutors, in the specific context of online discussion, in a postgraduate blended-learning programme?
 - 1a. How can students' experiences within this programme be characterised?
 - 1b. How does the interaction between tutors and students impact upon online discussion?
2. How might tutors enhance students' experience of online discussion?
 - 2a. To what extent, if at all, might a tutor support the development and maintenance of an online 'community' (eg: a Community of Inquiry)?

These questions have all been answered by analysis of a single Case Study, but the majority are inherently wider in reach than just the local situation of one programme. The one exception is Sub-question 1a, which is clearly locally-based. However, this answers the inherent need of a Case Study to first of all describe the 'case' prior to deeper exploration, or as Bassey (1999: 58) puts it, *"to explore significant features of the case"*. It is also necessary to provide sufficient contextual information to allow judgements to be made as regards generalisability and the transferability of the broader theoretical findings and practical advice generated by this study.

9.2 Generalisability

Firestone (1993:16) describes three different types of generalisation: *"sample-to-population extrapolation, analytic generalization, and case-to-case transfer"*, and, to a certain extent at least, it can be seen that this research study manifests aspects of all three types of generalisation, since interviews took place with only 24 out of the total population of 33 students, thus

CHAPTER 9: IMPACT, GENERALISABILITY & FUTURE WORK

requiring some minor extrapolation (although, of course, the discussion board analysis captured everyone's postings). Meanwhile, the generation of the theoretical model presented in Section 8.2 [Figure 8.2] can clearly be classed as 'analytic generalisation' (Firestone, op.cit.) leading from the specific case to a broader theoretical position. The exploration of characteristics that may invite a wider application of this theorisation (Firestone's 'Case-to-case transfer') is presented below.

In considering the potential generalisability and further applicability of this research into other contexts, I have been influenced substantially by Bassey's (2001a, 2001b) notions of 'Fuzzy Generalisation' and 'Best Estimate of Truthfulness'; although it should, perhaps, be noted that these also resonate with Campbell's concept of 'proximal similarity' (Campbell, 1986; Brunner, 1987), as well as with Firestone's (1993:16) proposition of 'case-to-case transfer', discussed above, and redefined by Polit and Beck (2010: 1453) simply as 'transferability'.

The concepts of transferability or 'fuzzy generalisation' (Bassey, 2001a) are based on the idea that the closer a new context is to the original situated context of a Case Study, the more likely it is to have a close resonance with the findings – that is to say, we cannot predict that if we take action in a particular way, something **will** happen in the new context, but we can predict that it **may** happen, with differing degrees of certainty, thus allowing findings from a Case Study to be potentially transferred to a different, albeit somehow related context.

The situated context of this Case Study is one specific intake of the PGCTLCP course, and so a very close resonance, approaching a perfect fit (100%), or what Bassey (2001a:11) terms 'Scientific Generalisation', can be expected for other intakes of this same course. I would suggest that this is also extremely likely for intakes of students joining the suite of other modules and course pathways within the same MA portfolio (MA Clinical Education), since these all cover the same discipline of study for the same professional groups, delivered by the same course team and with the same approach and underpinning pedagogy. Of course, this hypothesis has yet to be tested, and thus should ideally form an early strand of future work. Meanwhile, for other contexts, the salient features of this course need to be identified, to assist with understanding the extent to which Fuzzy Generalisations (Bassey, op.cit.) may be made.

1. It is a **blended learning course**, so other courses which adopt a blended approach might expect a very close resonance. Courses which are fully online might also expect a close resonance, due to the sizeable online learning component of this particular blended course;

CHAPTER 9: IMPACT, GENERALISABILITY & FUTURE WORK

whereas campus-based face-to-face classes that utilise the VLE simply as an enhancement rather than as a means of delivery may potentially differ.

2. Discussion, and in particular, the use of an **asynchronous approach to discussion**, is at the very heart of the PGCTLCP course design, and exemplifies a pedagogic approach which values social constructivism as a way of maximising learning opportunities. This is a key aspect of the course, and thus the closest resonance should be found in those courses which adopt a similar approach.

3. The PGCTLCP course is **postgraduate** in nature. It is not for participants who are just starting out on their academic journey, and so the closest resonance should be found in courses at postgraduate level, where all participants have some experience and prior knowledge to share and to build upon. Undergraduate courses might also be expected to have some resonance, especially in the later years of study; whereas courses outside of the university context may have less resonance with these findings, due to major differences from the original Case (although, of course, this hypothesis has not yet been tested).

4. The course is also **professional** in nature. It is not simply deepening theoretical knowledge of an academic discipline, it also has a practice-based element of study, which automatically brings participants together, by dint of their shared professional backgrounds and professional values, and so may also be seen to naturally pre-dispose them towards forming a Community of Practice.

5. Items 3 and 4 in this list also carry with them a further, implicit feature, which is that the participants on this course also had a level of **maturity** alongside their academic and professional experience, from which they may reasonably be expected to draw some generic life skills, such as social and work-based communication. It has been noted already that their age ranged from 26 – 54, with the majority of participants being over 30 [Section 5.1].

6. The course is focused on clinical **education** as its academic discipline, and as noted in Section 5.4b, the drive of the course towards educator development may influence the willingness of students to act in a facilitative manner, as well as their awareness and understanding of the potential usefulness of discussion to underpin a social constructivist approach to learning. It is, however, not an uncommon situation, with much of the work on Communities of Inquiry (Garrison et al, 2000) arising out of similar postgraduate teacher

education courses, as noted in Chapter 2. However, Arbaugh and colleagues (2010) have identified subject discipline as a potentially confounding factor in relation to Community of Inquiry research, especially when considering pure, as opposed to applied subjects. Thus, it appears that the subject area itself is of some importance, and so I would counsel that greatest resonance with the findings from this Case Study might be expected in courses for clinical educators, and also in other courses focused on the education of teachers in general, with some resonance expected for other applied and professional disciplines.

9.3 Recommendations for Future Work

As noted above, this study has developed a theoretical perspective that indicates a dynamic and highly contextualised need for tutor support and intervention on the part of students studying online in a specific blended-learning programme; and this theoretical model has been accompanied by the development of a behavioural check-list of practical indicators, designed to assist the practitioner in applying and benefiting from using the theoretical model. Estimates for transferability and generalisation of these findings beyond this course have been discussed, above. However, it is beyond the scope of this current study to ascertain the extent to which the quadrant Model of Students' Expressed Needs for Tutor Intervention and associated check-list of Indicators truly holds in contexts beyond the one from which it was derived. Therefore, further work is required, firstly, to test the applicability of the theoretical model and associated indicators locally, in other cohorts of the PGCTLCP programme and in related courses within the suite of provision in the field of postgraduate clinical education (MA Clinical Education). This, then, is an identified plan for my own immediate future work, in order to establish the Quadrant Model and associated check-list of Indicators more fully in my own context of postgraduate clinical education. Since I serve as the Programme Leader for whole of my institution's MA Clinical Education (comprising three different course pathways for Postgraduate Certificate, as well as a Postgraduate Diploma and MA in Clinical Education), I have ample opportunity to undertake this further stage of research.

A further stage of enhancement, either for myself or others to carry out, would then be the application of this model and associated indicators to blended and online professional postgraduate courses in other disciplines; and then to other postgraduate courses; and finally, to test whether its use can also be extended into undergraduate courses, both in education and other applied disciplines, and beyond.

9.4 Conclusion

On Page 1 of this Thesis, I opined that online discussion, as a strategy to support and encourage student learning, is a highly complex and as yet not fully understood area of educational practice. The theoretical model of students' expressed need for tutor support and intervention, which has emerged from this research, takes us a good step closer to understanding this phenomenon, especially when coupled with the associated check-list of behavioural indicators, which can be applied in practice, by tutors in online and blended programmes.

Furthermore, the broad research plan for future work, outlined above, is intended to establish the overall robustness and usefulness of the Quadrant Model and associated check-list of Indicators as a practical tool to enhance online tutors' educational practice on a day-to-day basis. Thus, it is hoped that the outcomes of this current research will prove, in time, to offer an essential tool to guide practitioners' actions in supporting online learners and facilitating rich and meaningful online dialogue, in a wide variety of educational contexts.

CHAPTER 10: REFERENCES

Abedin, B., Daneshgar, F. & D'Ambra, J. (2014) 'Pattern of non-task interactions in asynchronous computer-supported collaborative learning courses'. *Interactive Learning Environments*. 22 (1) pp. 18-34.

Akyol, Z., & Garrison, D. R. (2008) 'The development of a community of inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence'. *Journal of Asynchronous Learning Networks*. 12 (3) pp. 3-22.

Akyol, Z., Arbaugh, J.B., Cleveland-Innes, M., Garrison, D.R., Ice, P., Richardson, J.C. & Swan, K. (2009a) 'A Response to the Review of the Community of Inquiry Framework'. *Journal of Distance Education*. 23 (2) pp.123-136.

Akyol, Z. & Garrison, D.R. (2011a) 'Assessing metacognition in an online community of inquiry'. *The Internet and Higher Education*. 14 (3) pp. 183–190.

Akyol, Z., & Garrison, R. (2011b) 'Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning'. *British Journal of Educational Technology*. 42 (2) pp. 233–250.

An, H., Shin, S. & Lim, K. (2009) 'The effects of different instructor facilitation approaches on students' interactions during asynchronous online discussions'. *Computers & Education*. 53 (3) pp. 749–760.

Anderson, B. (2006) 'Writing power into online discussion'. *Computers and Composition*. 23 (1) pp.108-124.

Anderson, T. & Garrison, D.R. (1998) 'Learning in a Networked World: New Roles and Responsibilities'. In: Gibson, C. (Ed.) *Distance Learners in Higher Education: institutional responses for quality outcomes*. Madison, WI: Attwood. pp. 97-112.

Anderson, T., Rourke, L., Garrison, D.R. & Archer, W. (2001) 'Assessing Teaching Presence in a Computer Conferencing Context.' *Journal of Asynchronous Learning Networks*. 5 (2) pp. 1-17.

- Anderson, T. (2003) 'Getting the Mix Right Again: An Updated and Theoretical Rationale for Interaction'. *International Review of Research in Open and Distance Learning*. 4 (2). <http://www.irrodl.org/index.php/irrodl/article/view/149> [accessed 17 September 2007]
- Andresen, M.A. (2009) 'Asynchronous discussion forums: success factors, outcomes, assessments, and limitations'. *Journal of Educational Technology & Society*. 12 (1) pp. 249-257.
- Arbaugh, J.B. (2004) 'Learning to learn online: A study of perceptual changes between multiple online course experiences'. *The Internet and Higher Education*. 7 (3) pp. 169–182.
- Arbaugh, J. B. (2005) 'Is there an optimal design for on-line MBA courses?' *Academy of Management Learning & Education*. 4 (2) pp. 135-149.
- Arbaugh, J.B. & Hwang, A. (2006) 'Does “teaching presence” exist in online MBA courses?' *The Internet and Higher Education*. 9 (1) pp. 9 –21.
- Arbaugh, J.B. (2007) 'An empirical verification of the community of inquiry framework'. *Journal of Asynchronous Learning Networks*. 11 (1) pp. 73-84.
- Arbaugh, J.B., Cleveland-Innes, M., Díaz, S.R., Garrison, D.R., Ice, P., Richardson, J.C. & Swan, K.P. (2008) 'Developing a community of inquiry instrument: Testing a measure of the Community of Inquiry framework using a multi-institutional sample'. *The Internet and Higher Education*. 11 (3-4) pp. 133–136.
- Arbaugh, J.B. (2010) 'Sage, guide, both, or even more? An examination of instructor activity in online MBA courses'. *Computers & Education*. 55 (3) pp. 1234–1244.
- Arbaugh, J.B., Bangert, A. & Cleveland-Innes, M. (2010) 'Subject matter effects and the Community of Inquiry (CoI) framework: An exploratory study'. *The Internet and Higher Education*. 13 (1-2). pp.37-44.
- Archer, W. (2010) 'Beyond online discussions: Extending the community of inquiry framework to entire courses'. *The Internet and Higher Education*. 13 (1-2) p.69.

- Archibald, D. (2010) 'Fostering the development of cognitive presence: Initial findings using the community of inquiry survey instrument'. *The Internet and Higher Education*. 13 (1-2) pp. 73-74.
- Attride-Stirling, J. (2001) 'Thematic networks: an analytic tool for qualitative research'. *Qualitative Research*. 1 (3) pp. 385-405.
- Aydin, C.H. (2005) 'Turkish mentors' perception of roles, competencies and resources for online learning'. *Turkish Online Journal of Distance Education – TOJDE*. 6 (3) pp. 58–80.
- Baker, D. (2011) 'Designing and Orchestrating Online Discussions'. *MERLOT Journal of Online Learning and Teaching*. 7 (3) pp. 401- 411.
- Baran, B. & Cagiltay, K. (2010) 'Motivators and barriers in the development of online communities of practice'. *Egitim Arastirmalari - Eurasian Journal of Educational Research*. 39, pp. 79-96.
- Baran, E. & Correia, A.-P. (2009) 'Student-led facilitation strategies in online discussions'. *Distance Education*. 30 (3) pp. 339–361.
- Barry, C.A., Britten, N., Barber, N., Bradley, C. & Stevenson, F. (1999) 'Using Reflexivity to Optimize Teamwork in Qualitative Research'. *Qualitative Health Research*. 1999 (9) pp. 26-44.
- Bassey, M. (1999) *Case Study Research in Educational Settings*. Maidenhead: Open University Press.
- Bassey, M. (2001a) 'A Solution to the Problem of Generalisation in Educational Research: fuzzy prediction'. *Oxford Review of Education*. 27 (1) pp. 5-22.
- Bassey, M. (2001b) 'Fuzzy Generalisation: transforming research findings into fuzzy predictions which can inform teachers', policy makers' and researchers' discourse and action'. *BERA Symposium at AERA 2001 at Seattle on 12 April 2001*. BERA. ISBN 0 946671 11 7.
- Baynton, M. (1992) 'Dimensions of “control” in distance education: A factor analysis'. *American Journal of Distance Education*. 6 (2) pp.17-31.

- Beaudoin, M.F. (2002) 'Learning or lurking? Tracking the "invisible" online student'. *The Internet and Higher Education*. 5 (2) pp. 147-155.
- Benner, P. (2004) 'Using the Dreyfus Model of Skill Acquisition to Describe and Interpret Skill Acquisition and Clinical Judgment in Nursing Practice and Education'. *Bulletin of Science Technology & Society*. 24 (3) pp. 188-199.
- Benson, R. & Samarawickrema, G. (2009) 'Addressing the context of e-learning: using transactional distance theory to inform design'. *Distance Education*. 30 (1) pp. 5–21.
- Bento, R., Brownstein, B., Kemery, E. & Rawson Zacur, S. (2005) 'A Taxonomy Of Participation In Online Courses'. *Journal of College Teaching & Learning*. (12). pp. 79-86.
- Berge, Z.L. (1995) 'Facilitating Computer Conferencing: Recommendations From the Field'. *Educational Technology*. 35 (1) pp. 22-30.
- Bergstrom, P. (2010) 'Process-Based Assessment for Professional Learning in Higher Education: Perspectives on the Student-Teacher Relationship'. *International Review of Research in Open and Distance Learning*. 11(2).
<http://www.irrodl.org/index.php/irrodl/article/view/816/1558> [accessed 6 August 2010]
- Beuchot, A. & Bullen, M. (2005) 'Interaction and Interpersonality in Online Discussion Forums'. *Distance Education*. 26 (1) pp. 67–87.
- Blanchard, K.H., Zigarmi, D. & Nelson, R.B. (1993) 'Situational Leadership After 25 Years: A Retrospective'. *The Journal of Leadership Studies*. 1 (1) pp. 21-36.
- Bleazby, J. (2012) 'How Compatible are Communities of Inquiry and the Internet? Some Concerns about the Community of Inquiry Approach to E-learning'. *E-Learning and Digital Media*. 9 (1) pp.1-12.
- Blignaut, A.S. & Trollip, S.R. (2003a) 'Developing a taxonomy of faculty participation in asynchronous learning environments - an exploratory investigation'. *Computers & Education*. 41 (2) pp. 149-172.

- Blignaut, A.S. & Trollip, S.R. (2003b) 'Measuring Faculty Participation in Asynchronous Discussion Forums'. *Journal of Education for Business*. July/August 2003, pp. 347-353.
- Blignaut, A.S. & Trollip, S.R. (2005a) 'Between a rock and a hard place: Faculty participation in online Classrooms'. *Education as Change*. 9 (2), pp. 5-23.
- Blignaut, S. & Nagel, L. (2009) 'Cousins Virtual Jane and Virtual Joe, extraordinary virtual helpers'. *Computers & Education*. 53 (1) pp. 104–111.
- Bliss, C.A. & Lawrence, B. (2009) 'From Posts to Patterns: A Metric to Characterize Discussion Board Activity in Online Courses'. *Journal of Asynchronous Learning Networks*. 13 (2) pp. 15-32.
- Bogler, R., Caspi, A. & Roccas, S. (2013) 'Transformational and Passive Leadership: An Initial Investigation of University Instructors as Leaders in a Virtual Learning Environment'. *Educational Management Administration & Leadership*. 41(3) pp. 372–392.
- Borgatti, S.P. (2002) *NetDraw Software for Network Visualization*. Lexington, KY: Analytic Technologies.
- Bradley, J. (2010) 'Promoting and Supporting Authentic Online Conversations - Which Comes First - The Tools or Instructional Design?'. *International Journal of Pedagogies and Learning*. 5 (3) pp. 20-31.
- British Educational Research Association (2004) 'Revised Ethical Guidelines for Educational Research (2004)'. Macclesfield: BERA. <http://www.bera.ac.uk/files/guidelines/ethical1.pdf> [accessed 2 January 2010]
- British Educational Research Association (2011) 'Ethical Guidelines for Educational Research'. London: BERA. <http://www.bera.ac.uk/system/files/3/BERA-Ethical-Guidelines-2011.pdf> [accessed April 2012]
- British Medical Journal (1996) 'The Nuremberg Code (1947)'. *BMJ* 1996 (313) p.1448. <http://www.bmj.com/cgi/content/full/313/7070/1448> [accessed January 2010].

Brook, C. & Oliver, R. (2003) 'Online learning communities: Investigating a design framework'. *Australian Journal of Educational Technology*. 19 (2) pp. 139-160.

Brookfield, S. (1995) *Becoming a Critically Reflective Teacher*. San Francisco: Jossey-Bass.

Brookfield, S. (1998) 'Critically Reflective Practice'. *The Journal of Continuing Education in the Health Professions*. 18 (4) pp. 197–205.

Brookfield, S.D. & Preskill, S. (1999) *Discussion as a Way of Teaching: Tools and Techniques for University Teachers*. Maidenhead: Open University Press.

Brookfield, S.D. & Preskill, S. (2005) *Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms*. 2nd edition. San Francisco: Jossey-Bass.

Brunner, R.D. (1987) 'The Principle of Proximal Similarity'. *Science Communication*. 9 (1) pp. 145-160.

Burgess, R.G. (1985) 'The whole truth? Some ethical problems of research in a comprehensive school'. In: Burgess, R.G. (Ed.) *Strategies of educational research: qualitative methods*. Lewes: Falmer. pp. 141-162.

Burton, N., Brundrett, M. & Jones, M. (2008) *Doing Your Educational Research Project*. London: Sage Publications.

Campbell, D.T. (1986) 'Relabeling internal and external validity for the applied social sciences'. In: Trochim, W. (Ed.) *Advances in Quasi-Experimental Design and Analysis*, No. 31. Jossey-Bass, San Francisco, pp. 67–77.

Campbell, P. & Cleveland-Innes, M. (2005) 'Emotional presence in the community of inquiry model: The student's viewpoint'. *Proceedings of 21st Annual Conference on Distance Teaching & Learning*. University of Madison, Wisconsin, USA. August 2005.

http://www.uwex.edu/disted/conference/Resource_library/proceedings/05_2024.pdf [accessed 17 September 2007]

Carr, W. & Kemmis, S. (1986) *Becoming Critical: education, knowledge and action research*. London: Routledge.

- Carr, W. (2000) 'Partisanship in Educational Research'. *Oxford Review of Education*. 26 (3/4) pp. 495-501.
- Celentin, P. (2007) 'Online Education: Analysis of Interaction and Knowledge Building Patterns Among Foreign Language Teachers'. *Journal of Distance Education*. 21 (3) pp. 39-58.
- Çelik, S. (2013) 'Unspoken social dynamics in an online discussion group: the disconnect between attitudes and overt behavior of English language teaching graduate students'. *Educational Technology Research and Development*. 61 (4) pp.665-683.
- Cheung W. S., Hew, K.F. & Ng, C.S.L. (2008) 'Toward an Understanding of Why Students Contribute in Asynchronous Online Discussions'. *Journal of Educational Computing Research*. 38 (1) pp. 29-50.
- Cleveland-Innes, M. & Campbell, P. (2012) 'Emotional Presence, Learning, and the Online Learning Environment '. *International Review of Research in Open and Distance Learning*. 9 (2). <http://www.irrodl.org/index.php/irrodl/article/view/1234/2333> [accessed 26 December 2012].
- Coar, L. & Sim, J. (2006) 'Interviewing one's peers: methodological issues in a study of health professionals'. *Scandinavian Journal of Primary Health Care*. 2006 (24) pp. 241-256.
- Cohen, L., Manion L. & Morrison K. (2007) *Research Methods in Education*. 6th edition. London: Routledge.
- Cohen, L., Manion L. & Morrison K. (2011) *Research Methods in Education*. 7th edition. London: Routledge.
- Connolly, M., Jones, C. & Jones, N. (2007) 'New approaches, new vision: capturing teacher experiences in a brave new online world'. *Open Learning*. 22 (1) pp. 43–56.
- Conrad, D. (2002) 'Deep in the hearts of learners: Insights into the nature of online community'. *Journal of Distance Education*. 17 (1) pp. 1-19.
- Conrad, D. (2005) 'Building and Maintaining Community in Cohort-Based Online Learning'. *Journal of Distance Education*. 20 (1) pp. 1-20.

- Coppola, N.G., Hiltz, S.R. & Rotter, N.G. (2002) 'Becoming a Virtual Professor: Pedagogical Roles and Asynchronous Learning Networks'. *Journal of Management Information Systems*. 18 (4) pp. 169-189.
- Creswell, J.W. (1998) *Qualitative Inquiry and Research Design. Choosing Among Five Traditions*. London: Sage Publications.
- Creswell, J. & Miller, D. (2000) 'Determining Validity in Qualitative Inquiry'. *Theory Into Practice*. 39 (3) pp. 124-130.
- Creswell, J.W. & Plano Clark, V.L. (2007) *Designing and Conducting Mixed Methods Research*. London: Sage Publications.
- Creswell, J.W. (2009) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd edition. London: Sage Publications.
- Creswell, J.W. & Plano Clark, V.L. (2011) *Designing and Conducting Mixed Methods Research*. 2nd edition. London: Sage Publications.
- Danchak, M. M., Walther, J. B. & Swan, K. (2001) 'Presence in mediated instruction: bandwidth, behavior, and expectancy violations'. *Paper presented at the Seventh Annual Sloan-C International Conference on Online Learning*, Orlando, Florida, USA.
- Daniel, B., Schwier, R.A. & McCalla, G. (2003) 'Social Capital in Virtual Learning Communities and Distributed Communities of Practice'. *Canadian Journal of Learning and Technology*. 29 (3). <http://www.cjlt.ca/index.php/cjlt/article/view/85/79> [accessed 17 July 2007]
- Davies, J. & Graff, M. (2005) 'Performance in e-learning: online participation and student grades'. *British Journal of Educational Technology*. 36 (4) pp. 657–663.
- Davis, D. (2009) 'Developing Faculty to Teach Online'. *The International Journal of Learning*. 16 (2) pp.155-168.
- Dawson, S. (2008) 'A study of the relationship between student social networks and sense of community'. *Educational Technology & Society*. 11 (3) pp. 224–238.

- Dawson, S. (2010) 'Seeing' the learning community: An exploration of the development of a resource for monitoring online student networking'. *British Journal of Educational Technology*. 41(5) pp. 736-752.
- Dawson, S., Bakharia, A., Lockyer, L. & Heathcote, E. (2011) '*Seeing' networks: visualising and evaluating student learning networks. Final Report 2011*. Canberra: Australian Learning and Teaching Council Ltd.
- DeLoach, S.B. & Greenlaw, S.A. (2007) 'Effectively Moderating Electronic Discussions'. *Journal of Economic Education*. 38 (4) pp. 419-434.
- Dennen, V.P. (2005) 'From Message Posting to Learning Dialogues: Factors affecting learner participation in asynchronous discussion'. *Distance Education*. 26 (1) pp. 127–148.
- Dennen, V.P. (2007) 'Presence and positioning as components of online instructor persona'. *Journal of Research on Technology in Education*. 40 (1) pp. 95–108.
- Dennen, V.P. & Wieland, K. (2008) 'Does Task Type Impact Participation? Interaction Levels and Learner Orientation in Online Discussion Activities'. *Technology, Instruction, Cognition and Learning*. 6 (2) pp. 105-124.
- Denzin, N.K. & Lincoln, Y.S. (2005) 'Introduction. The Discipline and Practice of Qualitative Research'. In: Denzin, N.K. & Lincoln, Y.S., (Eds.) *The SAGE Handbook of Qualitative Research*. 3rd edition. London: Sage Publications. pp. 1-41.
- Department of Health (2000) *No secrets: Guidance on developing and implementing multi-agency policies and procedures to protect vulnerable adults from abuse*. London: Department of Health.
- De Schryver, M., Mishra, P., Koehleer, M. & Francis, A. (2009) 'Moodle vs. Facebook: Does using Facebook for Discussions in an Online Course Enhance Perceived Social Presence and Student Interaction?'. In: Gibson, I., et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2009*. Chesapeake, VA: AACE. pp. 329-336.

- Díaz, S.R., Swan, K., Ice, P. & Kupczynski, L. (2010) 'Student ratings of the importance of survey items, multiplicative factor analysis, and the validity of the community of inquiry survey'. *The Internet and Higher Education*. 13 (1/2) pp. 22-30.
- Dixson, M., Kuhlhorst, M. & Reiff, A. (2006) 'Creating Effective Online Discussions: Optimal Instructor and Student Roles'. *Journal of Asynchronous Learning Networks*. 10 (4) pp. 15-28.
- Dreyfus, S.E. (2004) 'The Five-Stage Model of Adult Skill Acquisition'. *Bulletin of Science Technology & Society*. 24 (3) pp. 177-181.
- Dysthe, O. (2002) 'The Learning Potential of a Web-mediated Discussion in a University Course'. *Studies in Higher Education*. 27 (3) pp. 339-352.
- Ellis, R.A., Calvo, R., Levy, D. & Tan, K. (2004) 'Learning through discussions'. *Higher Education Research & Development*. 23 (1) pp. 73-93.
- Ellis, R.A. & Calvo, R.A. (2006) 'Discontinuities in university student experiences of learning through discussions'. *British Journal of Educational Technology*. 37 (1) pp. 55-68.
- Ellis, R. A., Goodyear, P., O'Hara, A. & Prosser, M. (2007) 'The university student experience of face-to-face and online discussions: coherence, reflection and meaning'. *ALT-J - Association for Learning Technology Journal*. 15 (1) pp. 83- 97.
- Fahy, P., Crawford, G. & Ally, M. (2001) 'Patterns of Interaction in a Computer Conference Transcript'. *International Review of Research in Open and Distance Learning*. 2 (1). <http://www.irrodl.org/index.php/irrodl/article/view/36> [accessed 17 July 2007]
- Firestone, W.A. (1993) 'Alternative arguments for generalizing from data as applied to qualitative research'. *Educational Researcher*. 22 (4) pp.16-23.
- Flinders, D. (1992) 'In search of ethical guidance: constructing a basis for dialogue'. *Qualitative Studies in Education*. 5 (2) pp. 101-115.

Furlong J. & Oancea A. (2005) *Assessing Quality in Applied and Practice-based Educational Research A Framework for Discussion*. ESRC.

http://www.esrc.ac.uk/ESRCInfoCentre/Images/assessing_quality_shortreport_tcm6-8232.pdf [accessed 2 January 2010].

Garrison, D.R. & Baynton, M. (1987) 'Beyond independence in distance education: The concept of control'. *The American Journal of Distance Education*. 1 (3) pp.3-15.

Garrison, D.R. (1991) 'Critical thinking and adult education: a conceptual model for developing critical thinking in adult learners'. *International Journal of Lifelong Education*. 20 (4) pp. 287-303.

Garrison, D.R., Anderson, T. & Archer, W. (2000) 'Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education'. *The Internet and Higher Education*. 2 (2-3) pp. 87-105.

Garrison, D. R., Anderson, T. & Archer, W. (2001) 'Critical thinking, cognitive presence, and computer conferencing in distance education'. *American Journal of Distance Education*. 15 (1) pp. 7–23.

Garrison, D.R. & Anderson, T. (2003) *E-Learning in the 21st Century: A Framework for Research and Practice*. Abingdon: RoutledgeFalmer.

Garrison, D.R., Cleveland-Innes, M. & Fung, T. (2004) 'Student Role Adjustment in Online Communities Of Inquiry: Model and Instrument Validation'. *Journal of Asynchronous Learning Networks*. 8 (2) pp. 61-74.

Garrison, D.R. & Kanuka, H. (2004) 'Blended Learning: uncovering its transformative potential in higher education'. *The Internet and Higher Education*. 7 (2) pp. 95-105.

Garrison, D.R. & Cleveland-Innes, M. (2005) 'Facilitating Cognitive Presence in Online Learning: Interaction Is Not Enough'. *American Journal of Distance Education*. 19 (3) pp.133–148.

Garrison, D.R. (2006) 'Online Collaboration Principles'. *Journal of Asynchronous Learning Networks*. 10 (1) pp. 25-35.

Garrison, D. R., Anderson, T. & Archer, W. (2010) 'The first decade of the community of inquiry framework: A retrospective'. *The Internet and Higher Education*. 13 (1-2) pp. 5-9.

Garrison, D.R., Cleveland-Innes, M. & Fung, T.S. (2010) 'Exploring causal relationships among teaching, cognitive and social presence: Student perceptions of the community of inquiry framework'. *The Internet and Higher Education*. 13 (1-2) pp. 31-36.

Garrison, D.R. (2011a) *E-Learning in the 21st century: A framework for research and practice*. 2nd edition. London: Routledge.

Garrison, D.R. (2011b) 'A Response to David Annand - Social Presence within the Community of Inquiry Framework The International Review of Research in Open and Distance Learning, 2011'. <http://communitiesofinquiry.com/node/20> [accessed 10 January 2012]

Garrison, D.R. & Akyol, Z. (2013) 'Toward the development of a metacognition construct for communities of inquiry'. *The Internet and Higher Education*. 17 (April 2013) pp. 84–89.

Garrison, D.R. & Akyol, Z. (2015) 'Toward the development of a metacognition construct for communities of inquiry'. *The Internet and Higher Education*. 24 (January 2015) pp. 66-71.

Gerber, S., Scott, L., Clements, D. & Sarama, J. (2005) 'Instructor influence on reasoned argument in discussion boards'. *Educational Technology Research & Development*. 53(2) pp. 25-39.

Gerlock, J.A. & McBride, D.L. (2013) 'Managing Online Discussion Forums: Building Community by Avoiding the Drama Triangle'. *College Teaching*. 61 (1) pp. 23–29.

Gibbs, G. (2007) *Analysing Qualitative Data*. London: Sage Publications.

Giddings, L.S., Campbell, S. & Maclaren, P. (2006) 'Going online to learn health sciences research methods: The student experience'. *Australasian Journal of Educational Technology*. 22 (2) pp. 251-267. <http://www.ascilite.org.au/ajet/ajet22/giddings.html> [accessed 9 May 2007]

Gilbert, S.W. (2004) 'If it ain't broke, improve it: Thoughts on engaging education for us all'. *Journal of Asynchronous Learning Networks*. 8 (1) pp. 39-53.

- Gilbert, P.K. & Dabbagh, N. (2005) 'How to structure online discussions for meaningful discourse: a case study'. *British Journal of Educational Technology*. 36 (1) pp. 5–18.
- Gillon, R. (1985) ' 'Primum non nocere' and the principle of non-maleficence'. *British Medical Journal*. 291 (6488) pp. 130-131.
- Glaser, B.G. & Strauss, A.L. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Goodfellow, R. & Hewling, A. (2005) 'Reconceptualizing Culture in Virtual learning Environments: from an 'essentialist' to a 'negotiated' perspective'. *E-learning*. 2 (4) pp. 355 – 367.
- Goodyear, P. & Ellis, R. (2007) 'Students' interpretations of learning tasks: Implications for educational design'. *Proceedings of ASCILITE conference Singapore 2007*. pp. 339-346.
<http://www.ascilite.org.au/conferences/singapore07/procs/goodyear.pdf> [accessed 2 February 2008]
- Gorham, J. (1988) 'The relationship between verbal teacher immediacy behaviors and student learning'. *Communication Education*. 37 (1) pp. 40-53.
- Gorham, J. & Zakahi, W.R. (1990) 'A comparison of teacher and student perceptions of immediacy and learning: Monitoring process and product'. *Communication Education*. 39 (4), pp. 354-368.
- Greenbank, P. (2003) 'The role of values in educational research: the case for reflexivity'. *British Educational Research Journal*. 29 (6) pp. 791-801.
- Gregori, E., Torras, E. & Guasch, T. (2012) 'Cognitive attainment in online learning environments: matching cognitive and technological presence'. *Interactive Learning Environments*. 20 (5) pp. 467-483.
- Grow, G.O. (1991) 'Teaching Learners to be Self-Directed'. *Adult Education Quarterly*. 41 (3) pp. 125-149.

- Groundwater-Smith, S. & Mockler, N. (2002) 'Building Knowledge, Building Professionalism: The Coalition of Knowledge Building Schools and Teacher Professionalism'. *Australian Association for Educational Research Annual Conference, University of Queensland, 1 - 5 December 2002*. <http://www.aare.edu.au/02pap/moc02157.htm> [accessed 2 January 2010]
- Groundwater-Smith, S. & Mockler, N. (2007) 'Ethics in practitioner research: an issue of quality'. *Research Papers in Education*. 22 (2) pp. 199-211.
- Guba, E.G. & Lincoln, Y.S. (1994) 'Competing paradigms in qualitative research'. In: Denzin, N.K. & Lincoln, Y.S. (eds.) *Handbook of Qualitative Research*. London: Sage Publications. pp. 105-117.
- Gulati, S. (2008) 'Compulsory participation in online discussions: is this constructivism or normalisation of learning?'. *Innovations in Education and Teaching International*. 45 (2) pp.183–192.
- Guldborg, K. & Pilkington, R. (2007) 'Tutor roles in Facilitating Reflection on Practice Through Online Discussion'. *Educational Technology & Society*. 10 (1) pp. 61-72.
- Gunawardena, C., Lowe, C. & Anderson, T. (1997) 'Analysis of a global online debate and the development of an interaction analysis model for examining social construction of knowledge in computer conferencing'. *Journal of Educational Computing Research*. 17 (4) pp. 397–431.
- Hammersley, M. (1992) *What's Wrong With Ethnography?* London: Routledge.
- Hammersley, M. (2001) 'On Michael Bassey's Concept of the Fuzzy Generalisation'. *Oxford Review of Education*, 27(2) pp. 219-225.
- Hammersley, M. (2006) 'Philosophy's Contribution to Social Science Research on Education'. *Journal of Philosophy of Education*. 40 (2) pp. 273-286.
- Hammersley, M. & Traianou, A. (2007) *Ethics and Educational Research*. London: TLRP. <http://www.bera.ac.uk/ethics-and-educational-research/> [accessed 2 January 2010]
- Hammond, M. (1999) 'Issues associated with participation in on line forums - the case of the communicative learner'. *Education and Information Technologies*. 4 (4) pp. 353-367.

- Hara, N. & Hew, K.F. (2007) 'Knowledge-sharing in an online community of health-care professionals'. *Information Technology & People*. 20 (3) pp. 235-261.
- Hartley, P. (2013) 'Reflections'. *Keynote address to SOLSTICE conference "Learning & Teaching in Higher Education: Effective Practices"*, Edge Hill University, Ormskirk. 5-6 June 2013. <http://www.youtube.com/watch?v=turuGpq1es8> [accessed 10 January 2014]
- Haughey, D.J. (2007) 'Ethical relationships between instructor, learner and institution'. *Open Learning: The Journal of Open & Distance Learning*. 22 (2) pp. 139-147.
- Heckman, R. & Annabi, H. (2006) 'How the Teacher 's Role Changes in On-line Case Study Discussions'. *Journal of Information Systems Education*. 17 (2) pp. 141-150.
- Henderson, M. (2007) 'Sustaining online teacher professional development through community design'. *Campus-Wide Information Systems*. 24 (3) pp. 162-173.
- Heron, J. (1999) *The Complete Facilitator's Handbook*. London: Kogan Page.
- Hew, K.F. & Cheung, W.S. (2008) 'Attracting student participation in asynchronous online discussions: A case study of peer facilitation'. *Computers & Education*. 51 (3) pp. 1111-1124.
- Hew, K.F., Cheung, W.S. & Ng, C.S.L. (2010) 'Student contribution in asynchronous online discussion: a review of the research and empirical exploration'. *Instructional Science*. 38 (6) pp. 571-606.
- Hew, K.F. & Cheung, W.S. (2011) 'Higher-level knowledge construction in asynchronous online discussions: an analysis of group size, duration of online discussion, and student facilitation techniques'. *Instructional Science*. 39 (3) pp. 303-319.
- Hewitt, J. & Teplovs, C. (1999) 'An analysis of growth patterns in computer conferencing threads'. *CSCL '99 Proceedings of the 1999 conference on Computer support for collaborative learning*. Article No. 29.
http://dl.acm.org/ft_gateway.cfm?id=1150269&type=pdf&CFID=115097058&CFTOKEN=11377598
[accessed 17 September 2007]

- Hewitt, J. (2003) 'How habitual online practices affect the development of asynchronous discussion threads'. *Journal of Educational Computing Research*. 28 (1) pp. 31-45.
- Hewitt, J. (2005) 'Toward an understanding of how threads die in asynchronous computer conferences'. *Journal of the Learning Sciences*. 14 (4) pp. 567-589.
- Hexom, D. & Menoher, J. (2012) 'Addressing the Affective Domain in Online University Courses'. *The International Journal of Learning*. 18 (8) pp.141-151.
- Hopkins, J., Gibson, W., Ros i Solé, C., Savvides, N. & Starkey, H. (2008) 'Interaction and critical inquiry in asynchronous computer-mediated conferencing: a research agenda'. *Open Learning*. 23 (1) pp. 29-42.
- Hostetter, C. & Busch, M. (2013) 'Community matters: Social presence and learning outcomes'. *Journal of the Scholarship of Teaching and Learning*. 13 (1). pp. 77 – 86.
- Hung, D. & Chen, D. (2002) 'Understanding how thriving Internet quasi-communities work: Distinguishing between learning about and learning to be'. *Educational Technology*. 42(1) pp. 23-27.
- Illeris, K. (2003) 'Towards a contemporary and comprehensive theory of learning'. *International Journal of Lifelong Education*. 22(4) pp. 396-406.
- Janesick, V.L. (2003) 'The Choreography of Qualitative Research Design: Minuets, Improvisations, and Crystallization.' In Denzin, N.K. & Lincoln, Y.S. (eds) *Strategies of Qualitative Enquiry*. 2nd edition. London: Sage Publications. pp. 46-79.
- Jézégou, A. (2010) 'Community of Inquiry in e-Learning: A Critical Analysis of the Garrison and Anderson Model '. *Journal of Distance Education*. 24 (3).
- Jeong, A. (2004) 'The Combined Effects of Response Time and Message Content on Growth Patterns of Discussion Threads in Computer-Supported Collaborative Argumentation'. *Journal of Distance Education*. 19 (1) pp. 36-53.
- Johnson, C.M. (2001) 'A survey of current research on online communities of practice'. *The Internet and Higher Education*. 4 (1) pp. 45-60.

- Joyes, G. (2009a) 'Introduction: The e-Educator Training Module'. *Malaysian Journal of Distance Education*. 11(1) pp. 1-7.
- Joyes, G. (2009b) 'Tutors' Perceptions of Effective Online Pedagogy - The Learning Activity Analysis Tool'. *Malaysian Journal of Distance Education*. 11(1) pp. 57-69.
- Kamin, C.S., O'Sullivan, P., Deterding, R.R., Younger, M. & Wade T. (2006) 'A case study of teaching presence in virtual problem-based learning groups'. *Medical Teacher*. 28 (5) pp. 425–428.
- Kanuka, H., Rourke, L. & Laflamme, E. (2007) 'The influence of instructional methods on the quality of online discussion'. *British Journal of Educational Technology*. 38 (2) pp. 260–271.
- Kanuka, H. (2011) 'Interaction and the online distance classroom: Do instructional methods effect the quality of interaction?'. *Journal of Computing in Higher Education*. 23 (2-3) pp. 143–156.
- Kao, G.Y-M. (2013) 'Enhancing the quality of peer review by reducing student "free-riding": Peer assessment with positive interdependence'. *British Journal of Educational Technology*. 44 (1) pp.112-124.
- Kim, J. (2013) 'Influence of group size on students' participation in online discussion forums'. *Computers & Education*. 62. pp.123–129.
- Kirtman, L. (2009) 'Online versus in-class courses: An examination of difference in learning outcomes'. *Issues in Teacher Education*. 18 (2) pp.103-117.
- Klntmalm, G.B. (2008) 'Primum Non Nocere'. *American Journal of Transplantation*. 8 (2) pp. 275–276.
- Koh, M.H., Barbour, M. & Hill, J.R. (2010) 'Strategies for Instructors on How To Improve Online Groupwork'. *Journal of Educational Computing Research*. 43 (2) pp. 183-205.
- Kvale, S. (2007) *Doing Interviews*. London: Sage Publications.

- Lave, J. & Wenger, E. (1991) *Situated learning: legitimate, peripheral participation*. Cambridge: Cambridge University Press.
- Law, E.L.-C. & Nguyen-Ngoc, A.V. (2009) 'Analysis of Online Facilitators' Social Relations and Facilitating Styles in Cross- Cultural Computer-Supported Collaborative Learning'. *Technology, Instruction, Cognition and Learning*. 6 (4) pp. 315–332.
- Lee, S-M (2014) 'The relationships between higher order thinking skills, cognitive density, and social presence in online learning'. *The Internet and Higher Education*. 21 (April 2014) pp. 41–52.
- Lewis, D. & Allen, B. (2005) *Virtual Learning Communities. A Guide for Practitioners*. Maidenhead: Open University Press.
- Light, V., Nesbitt, E., Light, P. & Burns, J.R. (2000) 'let's you and me have a little discussion': Computer mediated communication in support of campus-based university courses'. *Studies in Higher Education*. 25 (1) pp.85–96.
- Lim, C.P. & Cheah, P.T. (2003) 'The Role of the Tutor in Asynchronous Discussion Boards: A Case Study of a Pre-Service Teacher Course'. *Education Media International*. 40 (1-2) pp. 33-47.
- Lincoln, Y.S. & Guba, E.G. (1985) *Naturalistic Inquiry*. London: Sage Publications.
- Lisbôa, E.S. & Coutinho, C.P. (2013) 'Analysing Interactions in a Teacher Network Forum: A Sociometric Approach'. *Journal of Digital Learning in Teacher Education*. 29 (4) pp.141-148.
- Lui, A.K., Tsang, P., Kwan, R., Ng, S.C., Cheung, Y.H.Y. & Choy, S.O. (2007) 'An evaluation framework of expertise presence in computer conferences'. *British Journal of Educational Technology*. 38 (6) pp. 1020–1036.
- MacNeill, H., Elner, D.T., Sparaggis-Agaliotis, A. & Hanna, E. (2014) 'All for One and One for All: Understanding Health Professionals' Experience in Individual Versus Collaborative Online Learning'. *Journal of Continuing Education in the Health Professions*. 34(2) pp. 102–111.

- Mason, J. (2006) 'Mixing methods in a qualitatively driven way'. *Qualitative Research*. 6 (1) pp. 9-25.
- Maurino, P.S.M., Federman, F. & Greenwald, L. (2007) 'Online Threaded Discussions: Purposes, Goals, And Objectives'. *Journal of Educational Technology Systems*. 36 (2) pp. 129-143.
- Mazzolini, M. & Maddison, S. (2003a) 'Sage, guide or ghost? The effect of instructor intervention on student participation in online discussion forums'. *Computers & Education*. 40 (3) pp. 237-253.
- Mazzolini, M. & Maddison, S. (2003b) 'Widening The Circle - Managing Discussion Forums in a Growing Online Program'. In: Crisp, G., Thiele, D., Scholten, I., Barker, S. & Baron, J. (Eds), *Interact, Integrate, Impact: Proceedings of the 20th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE)*. Adelaide, 7-10 December 2003. <http://www.ascilite.org.au/conferences/adelaide03/docs/pdf/322.pdf> [accessed 17 September 2007]
- Mazzolini, M. & Maddison, S. (2006) 'The Role of the Online Instructor as a Guide on the Side'. In: O'Donoghue, J. (Ed.). *Technology Supported Learning and Teaching : A Staff Perspective*. Hershey, PA, USA: Idea Group Publishing. pp. 224-241.
- Mazzolini, M. & Maddison, S. (2007) 'When to jump in: The role of the instructor in online discussion forums'. *Computers & Education*. 49 (2) pp. 193-213.
- McNiff, J. (2002) *Action research for professional development. Concise advice for new action researchers*. 3rd edition. <http://www.jeanmcniff.com/ar-booklet.asp> [accessed 2 January 2007]
- McWilliam, E. (2008) 'Unlearning how to teach'. *Innovations in Education and Teaching International*. 45 (3) pp. 263 – 269.
- Melrose, S. & Bergeron, K. (2007) 'Instructor immediacy strategies to facilitate group work in online graduate study'. *Australasian Journal of Educational Technology*. 23 (1) pp. 132-148.
- Merrett, F. (2006) 'Reflections on the Hawthorne Effect'. *Educational Psychology: An International Journal of Experimental Educational Psychology*. 26 (1) pp. 143-146.

- Meyer, J.H.F. & Land, R. (2005) 'Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning'. *Higher Education*. 49 (2005) pp. 373–388.
- Miles, M.B. & Huberman, A.M. (1994) *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd edition. London: Sage Publications.
- Mockler, N. (2014) 'When 'research ethics' become 'everyday ethics': the intersection of inquiry and practice in practitioner research'. *Educational Action Research*. 22 (2) pp. 146-158.
- Moisey, S.D., Neu, C. & Cleveland-Innes, M. (2008) 'Community Building and Computer-Mediated Conferencing'. *Journal of Distance Education*. 22 (2) pp.15-42.
- Moore, J.L., Dickson-Deane, C. & Galyen, K. (2011) 'e-Learning, online learning, and distance learning environments: Are they the same?'. *Internet and Higher Education*. 14 (2) pp. 129–135
- Moore, M. (1989) 'Three types of interaction'. *American Journal of Distance Education*. 3 (2) pp. 1-6.
- Moore, M. (1991) 'Distance education theory'. *American Journal of Distance Education*. 5 (3) pp. 1–6.
- Moore, M.G. (2013) 'The Theory of Transactional Distance'. In: Moore, M.G. (Ed.) *Handbook of Distance Education*. 3rd Edition. New York: Routledge. pp. 66-85.
- Morse, J.M. (1998) 'Designing Funded Qualitative Research' In: Denzin N.K. & Lincoln, Y.S. (eds) *Strategies of Qualitative Inquiry*, Vol. 2. London: Sage Publications. pp. 56-85.
- Motte, K. (2013) 'Strategies for Online Educators'. *Turkish Online Journal of Distance Education - TOJDE*. 14(2) pp.258-267.
- Moule, P. (2006a) 'Developing the Communities of Practice, Framework for On-Line Learning'. *The Electronic Journal of e-Learning*. 4 (2) pp 133 – 140.
- Moule, P. (2006b) 'E-learning for healthcare students: developing the communities of practice framework'. *Journal of Advanced Nursing*. 54 (3) pp. 370-380.

- Moule, P. (2007) 'Challenging the five-stage model for e-learning: a new approach', *ALT-J - Association for Learning Technology Journal*. 15 (1) pp. 37 - 50.
- Murphy, E. & Dingwall, R. (2003) 'The ethics of ethnography'. In: Atkinson, P., Coffey, A., Delamont, S., Lofland J., & Lofland, L. (Eds) *Handbook of Ethnography*. London: Sage Publications. pp. 339-351.
- Murphy, E. (2004a) 'Recognising and promoting collaboration in an online asynchronous discussion'. *British Journal of Educational Technology*. 35 (4) pp. 421-431.
- Nagel, L., Blignaut, A.S. & Cronjé, J.C. (2009) 'Read-only participants: a case for student communication in online classes'. *Interactive Learning Environments*. 17 (1) pp. 37-51.
- National Library of Medicine (2009) 'The Hippocratic Oath'. http://www.nlm.nih.gov/hmd/greek/greek_oath.html [accessed 2 January 2010].
- Networked Learning Community, CPD461 (2008) 'Why Did It Work For Us? Reflections on a successful networked learning community'. Proceedings of the 6th International Conference on Networked Learning. Technological Educational Institute of Thessaloniki & University of Piraeus, Halkidiki, Greece, 5-7 May 2008.
- Newby, P. (2010) *Research Methods for Education*. Harlow: Pearson.
- Oppenheim, A.N. (1992) *Questionnaire design, interviewing and attitude measurement*. London : Continuum.
- O'Reilly, M. & Newton, D. (2002) 'Interaction online: Above and beyond requirements of assessment'. *Australian Journal of Educational Technology*. 18 (1) pp.57-70.
- Painter, C., Coffin, C. & Hewings, A. (2003) 'Impacts of Directed Tutorial Activities in Computer Conferencing: A Case Study'. *Distance Education*. 24 (2) pp. 159-174.
- Palloff, R.M. & Pratt, K. (1999) *Building Learning Communities in Cyberspace: Effective Strategies for the Online Classroom*. San Francisco: Jossey-Bass.

CHAPTER 10: REFERENCES

- Palloff, R.M. & Pratt, K. (2007) *Building Online Learning Communities. Effective Strategies for the Virtual Classroom*. 2nd edition. San Francisco: Jossey-Bass.
- Parsell, M. & Duke-Yonge, J. (2007) 'Virtual Communities of Enquiry: an argument for their necessity and advice for their creation'. *E-Learning and Digital Media*. 4 (2) pp.181-193.
- Pawson, R. & Tilley, N. (1997) *Realistic Evaluation*. London: SAGE Publications.
- Persico, D., Pozzi, F. & Sarti, L. (2010) 'Monitoring collaborative activities in computer supported collaborative learning'. *Distance Education*. 31 (1) pp. 5–22.
- Pole, C. & Morrison M. (2003) *Ethnography for education*. Buckingham : Open University Press.
- Polit, D.F. & Beck, C.T. (2010) 'Generalization in quantitative and qualitative research: Myths and strategies'. *International Journal of Nursing Studies*. 47 (11) pp. 1451-1458.
- Poole, D. M. (2000) 'Student participation in a discussion- oriented online course: A case study'. *Journal of Research on Computing in Education*. 33 (2) pp. 162–177.
- Poscente, K. & Fahy, P. (2003) 'Investigating Triggers in CMC Text Transcripts'. *International Review of Research in Open and Distance Learning*. 4 (2).
<http://www.irrodl.org/index.php/irrodl/article/view/141/221> [accessed 17 September 2007]
- Pozzi, F., Manca, S., Persico, D. & Sarti, L. (2007) 'A general framework for tracking and analysing learning processes in CSCL environments'. *Innovations in Education and Teaching International*. 44 (2) pp. 169–179.
- Pozzi, F. (2009) 'Using collaborative techniques in virtual learning communities'. *LNCS – Lecture Notes in Computer Science*. 5794, pp. 670–675. doi:10.1007/978-3-642-04636-0_66
- Pring, R. (2004) *Philosophy of Educational Research*. 2nd edition. London: Continuum.
- Punch, K.F. (2009) *Introduction to Research Methods in Education*. London: Sage Publications.

- Qiu, M., Hewitt, J. & Brett, C. (2014) 'Influence of group configuration on online discourse writing'. *Computers & Education*. 71 (February 2014) pp. 289–302.
- Redmond, P. (2014) 'Reflection as an Indicator of Cognitive Presence'. *E-Learning and Digital Media*. 11 (1) pp. 46-58.
- Reingold, R., Rimor, R. & Kalay, A. (2008) 'Instructor's Scaffolding in Support of Student's Metacognition through a Teacher Education Online Course — A Case Study'. *Journal of Interactive Online Learning*. 7 (2) pp 139-151.
- Remesal, A. & Friesen, N. (2014) 'Inquiry into ‘Communities of Inquiry’: knowledge, communication, presence, community'. *E-Learning and Digital Media*. 11 (1) pp.1-4.
- Richardson, J.C. & Swan, K. (2003) ‘Examining social presence in online courses in relation to student’s perceived learning and satisfaction’. *Journal of Asynchronous Learning Networks*. 7 (1) pp. 68-88.
- Richardson, J.C. & Ice, P. (2010) ‘Investigating students' level of critical thinking across instructional strategies in online discussions’. *The Internet and Higher Education*. 13 (1-2) pp.52-59
- Robinson, K. (2009) 'Encouraging social presence and a sense of community in a virtual residential school'. *Open Learning*. 24 (2) pp. 127–139.
- Rourke, L., Anderson, T., Garrison, D. R. & Archer, W. (1999) 'Assessing Social Presence In Asynchronous Text-Based Computer Conferencing'. *Journal of Distance Education*. 14 (2) pp. 50-71.
- Rourke, L., Anderson, T., Garrison D.R. & Archer, W. (2001) ‘Methodological Issues in the Content Analysis of Computer Conference Transcripts’. *International Journal of Artificial Intelligence in Education*. 12 (1) pp. 8-22.
- Rourke, L. & Anderson, T. (2002) ‘Using peer teams to lead online discussion’. *Journal of Interactive Media in Education*. (1). <http://www-jime.open.ac.uk/2002/1/rourke-anderson-02-1.pdf> [accessed 6 June 2007]

- Rourke, L. & Kanuka, H. (2009) 'Learning in Communities of Inquiry: A Review of the Literature'. *Journal of Distance Education*. 23 (1) pp. 19-48.
- Rovai, A. (2002) 'Building a sense of community at a distance'. *International Review of Research in Open and Distance Learning*. 3 (1).
<http://www.irrodl.org/index.php/irrodl/article/view/79/153> [accessed 23 May 2008]
- Rovai, A. (2004) 'A constructivist approach to online college learning'. *The Internet and Higher Education*. 7 (2) pp. 79-93
- Sackville, A. & Sherratt, C. (2006) 'Styles of Discussion: Online Facilitation Factors'. In: Banks, S., Hodgson, V., Jones, C., Kemp, B., McConnell, D. & Smith, C. (Eds). *Proceedings of the 5th International Conference on Networked Learning 2006*. Lancaster: Lancaster University. ISBN 1-86220-182-X.
<http://www.networkedlearningconference.org.uk/past/nlc2006/abstracts/pdfs/P17%20Sackville.pdf>
[accessed 28 May 2007]
- Saldaña, J. (2009) *The Coding Manual for Qualitative Researchers*. London: Sage Publications.
- Salmon, G. (2000) *E-moderating: The Key to Teaching and Learning Online*. London: Kogan Page.
- Salmon, G. (2003) *E-moderating. The key to teaching and Learning online*. 2nd edition. London: Kogan Page.
- Salmon, G. (2007) 'The tipping point'. *ALT-J- Association for Learning Technology Journal*. 15 (2) pp. 171- 172.
- Salmon, G. (2011) *E-moderating. The key to teaching and Learning online*. 3rd edition. London: Routledge.
- Savery, J.R. (2005) 'BE VOCAL; Characteristics of Successful Online Instructors'. *Journal of Interactive Online Learning*. 4 (2) pp. 141-152.
- Savvidou, C. (2013) "'Thanks for sharing your story': the role of the teacher in facilitating social presence in online discussion". *Technology, Pedagogy and Education*. 22 (2) pp. 193-211.

- Scheper-Hughes, N. (2000) 'Ire in Ireland'. *Ethnography*. 1(1) pp. 117-140.
- Schulte, M. (2009) 'Efficient Evaluation of Online Course Facilitation: The "Quick Check" Policy Measure'. *The Journal of Continuing Higher Education*. 57 (2) pp. 110–116.
- Shackelford, J.L. & Maxwell, M. (2012) 'Contribution of Learner–Instructor Interaction to Sense of Community in Graduate Online Education'. *MERLOT Journal of Online Learning and Teaching*. 8 (4) pp. 248-260.
- Shea, P.J., Pickett, A.M. & Pelz, W.E. (2003) 'A Follow-Up Investigation of "Teaching Presence" in the SUNY Learning Network'. *Journal of Asynchronous Learning Networks*. 7 (2) pp. 61-80.
- Shea, P., Li, C.S. & Pickett, A. (2006) 'A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses'. *The Internet and Higher Education*. 9 (3) pp. 175-190.
- Shea, P. & Bidjerano, T. (2009) 'Community of inquiry as a theoretical framework to foster "epistemic engagement" and "cognitive presence" in online education'. *Computers & Education*. 52 (3) pp. 543–553.
- Shea, P. & Bidjerano, T. (2010) 'Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments'. *Computers & Education*. 55 (4) pp. 1721–1731.
- Shea, P., Hayes, S., Vickers, J., Gozza-Cohen, M., Uzuner, S., Mehta, R., Valchova, A. & Rangan, P. (2010a) 'A re-examination of the community of inquiry framework: Social network and content analysis'. *The Internet and Higher Education*. 13 (1-2) pp. 10–21.
- Shea, P., Vickers, J. & Hayes, S. (2010b) 'Online Instructional Effort Measured through the Lens of Teaching Presence in the Community of Inquiry Framework: A Re-Examination of Measures and Approach'. *International Review of Research in Open and Distance Learning*. 11 (3). <http://www.irrodl.org/index.php/irrodl/article/view/915/1650> [accessed 6 January 2011]
- Shea, P. & Bidjerano, T. (2012) 'Learning presence as a moderator in the community of inquiry model'. *Computers & Education*. 59 (2) pp. 316-326.

- Shea, P., Hayes, S., Smith, S.U., Vickers, J., Bidjerano, T., Pickett, A., Gozza-Cohen, M., Wilde, J. & Jian, S. (2012) 'Learning presence: Additional research on a new conceptual element within the Community of Inquiry (CoI) framework'. *The Internet and Higher Education*. 15 (2) pp. 89–95.
- Shea, P., Hayes, S., Smith, S.U., Gozza-Cohen, M., Vickers, J. & Bidjerano, T. (2014) 'Reconceptualizing the community of inquiry framework: An exploratory analysis'. *The Internet and Higher Education*. 23 (October 2014) pp. 9–17.
- Sheard, J., Ramakrishnan, S. & Miller, J. (2003) 'Modelling learner and educator interactions in an electronic learning community'. *Australian Journal of Educational Technology*. 19 (2) pp. 211-226.
- Sherratt, C.A. & Young, S.L. (2000) *Mistreatment & Abuse Of Older People: Investigating & Taking Action. A 2-Day Training Course*. Liverpool: Institute of Human Ageing. ISBN 0 9515459 6 5
- Sherratt, C.A. (2001) 'Consent and Capacity'. In: *Adult Protection Procedures: Vulnerable Adults*. Bootle: Sefton APC.
- Sherratt, C. & Sackville, A. (2005) 'Statement or Discussion? - Online Facilitation Factors'. *3rd CLTR conference*, January 2005, Edge Hill University, Ormskirk, UK.
- Sherratt, C. & Sackville, A. (2006a) 'Styles of Discussion: Influences and Trends'. *Proceedings of the First SOLSTICE Conference*. Edge Hill University, Ormskirk, UK. 3 May 2006.
<http://www.edgehill.ac.uk/Sites/SOLSTICE/Conference2006/documents/29.pdf> [accessed 28 October 2006]
- Sherratt, C. & Sackville, A. (2006b) 'Styles of Discussion: Influences and Trends'. *Symposium on Medical Interactive eLearning (SMILE)*, September 2006, Sestri Levante, Italy.
- Sherratt, C. & Sackville, A. (2006c) 'Online learning: developing styles of discussion'. *30th Collaborative Action Research Network (CARN) conference*, November 2006, Nottingham, UK.

Sherratt, C. & Sackville, A. (2007) 'Peeling the onion without tears: a layered approach to researching e-learning'. *Proceedings of the 2nd SOLSTICE Conference*. Edge Hill, Ormskirk, UK, May 2007.

Sherratt, C. (2008a) 'Working Together: Perceptions of the Role of the Tutor in a Postgraduate Online Learning Programme'. *Proceedings of the 6th International Conference on Networked Learning*. Halkidiki, Greece. May 2008, pp. 803-810. ISBN 978-1-86220-206-1.

http://www.networkedlearningconference.org.uk/past/nlc2008/abstracts/PDFs/Sherratt_803-810.pdf

[accessed 6 March 2010]

Sherratt, C. (2008b) 'Dangling Carrots or Downright Interfering? Student expectations of tutors in an online discussion board'. *Proceedings of the 3rd SOLSTICE conference*, Edge Hill, Ormskirk, UK. June 2008.

Sherratt, C. (2008c) 'Busy Doing Nothing.... Influencing the Development Of Meaningful Discourse Online'. *Proceedings of the 33rd International Improving University Teaching (IUT) Conference*, University of Strathclyde, Glasgow, UK. 29 July – 1 August 2008.

Sherratt, C. (2008d) 'Consent, Coercion and Collegiality: Ethics and Practitioner Research in a Team Environment'. *Paper presented to 'Cultural Kaleidoscopes: Exploring Ethics, Contexts and Conceptions', Collaborative Action Research Network (CARN) conference*, November 2008, Liverpool, UK.

Sherratt, C. (2009a) 'Autonomy & Authority: Creating a Learning Community Online'. In: Comrie, A., Mayes, N., Mayes, T. & Smyth, K. (Eds) *Proceedings of the Learners in the Co-creation of Knowledge (LICK) 2008 Symposium*. pp.91-97. Edinburgh: Napier University. ISBN: 978-0-902703-85-8.

Sherratt, C. (2009b) 'Andragogy or Alchemy? Building a Learning Community in Cyberspace'. *Proceedings of the 4th SOLSTICE Conference*, Edge Hill, Ormskirk, UK. June 2009.

Sherratt, C. (2009c) 'Human Touch : Building a Learning Community in Cyberspace'. *Proceedings of the 34th Improving University Teaching (IUT) Conference*, Simon Fraser University, Vancouver, Canada. July 2009.

- Sherratt, C. (2010) 'Happy together: peer facilitation and support in an online discussion forum'. *Proceedings of the 35th International Improving University Teaching Conference*, Washington, USA. July 2010.
- Sherratt, C. (2011) 'Collaboration and Community Presence in an Online Learning Environment'. *Proceedings of the 36th International Conference on Improving University Teaching (IUT)*, Bielefeld University, Germany, July 2011.
- Sherratt, C. (2012) 'Synergy, Supervision and Self-Reliance: Perceptions of the Role of the Tutor in a Postgraduate Online Learning Programme'. *E-Learning and Digital Media*. 9 (1) pp. 100-112.
- Silverman, D. (2011) *Interpreting Qualitative Data*. 4th edition. London: Sage Publications.
- Simons, H. (1996) 'The paradox of case study'. *Cambridge Journal of Education*. 26(2) pp. 225-240.
- Skinner, E. (2007) 'Engaging Students in Online Discussion – or not?' *Proceedings of the 2nd SOLSTICE Conference*. Edge Hill, Ormskirk, UK, May 2007.
- Spencer, L., Ritchie, J. & O'Connor, W. (2003) 'Analysis: Practices, Principles and Processes'. In: Ritchie, J. & Lewis, J. (Eds) *Qualitative research practice: a guide for social science students*. London: Sage Publications. pp. 199-218.
- Strauss, A.L. & Corbin, J.M. (1990) *Basics of Qualitative Research: Techniques for Developing Grounded Theory*. London: Sage Publications.
- Strauss, A.L. & Corbin, J.M. (1998) *Basics of Qualitative Research: Techniques for Developing Grounded Theory*. 2nd edition. London: Sage Publications.
- Swan, K. (2002a) 'Building Learning Communities in Online Courses: the importance of interaction'. *Education, Communication & Information*. 2 (1) pp. 23-49.
- Swan, K. (2003a) 'Developing social presence in online course discussions'. In: Naidu, S. (ed) *Learning & Teaching with Technology. Principles and practices*. London: Kogan Page. pp.136-153.

- Swan, K. (2004a) *Relationships Between Interactions and Learning In Online Environments*. Needham, MA: Sloan-C.
- Swan, K. (2005) 'A constructivist model for thinking about learning online'. In: Bourne, J. & Moore, J.C. (Eds.) *Elements of Quality Online Education: Engaging Communities*. Needham, MA: Sloan-C.
- Swan, K. & Shih, L.F. (2005) 'On the Nature & Development of Social Presence in Online Course Discussions'. *Journal of Asynchronous Learning Networks*. 9 (3) pp. 115-136.
- Swann, J. (2010) 'A dialogic approach to online facilitation'. *Australasian Journal of Educational Technology*. 26 (1) pp. 50-62.
- Tallent-Runnels, M.K., Thomas, J.A., Lan, W.Y., Cooper, S., Ahern, T.C., Shaw S.M. & Liu, X. (2006) 'Teaching Courses Online: A Review of the Research'. *Review of Educational Research*. 76, pp. 93-135.
- Tashakkori, A. & Creswell, J.W. (2007) 'The new era of mixed methods'. *Journal of Mixed Methods Research*. 1 (1) pp. 3-7.
- Taylor, J. C. (2002) 'Teaching and learning online: The workers, the lurkers and the shirkers'. *Paper presented at the 2002 Conference on Research in Distance & Adult Learning in Asia*. <http://www.ouhk.edu.hk/CRIDAL/cridala2002/speeches/taylor.pdf> [accessed 1 August, 2005].
- Teddlie, C. & Tashakkori, A. (2009) *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*. London: Sage Publications.
- Thomas, J. (2013) 'Exploring the use of asynchronous online discussion in health care education: A literature review'. *Computers & Education*. 69 (November 2013) pp. 199–215.
- Trowler, P. (2012) *Doing Insider Research in Universities*. Amazon Kindle edition. <http://tinyurl.com/d79wt6> [accessed 2 January 2012]
- van den Hoonaard, W.C. (2003) 'Is Anonymity an Artifact in Ethnographic Research?' *Journal of Academic Ethics*. 1 (2) pp. 141-151.

Vandergrift, K.E. (2002) 'The Anatomy of a Distance Education Course: A Case Study Analysis'. *Journal of Asynchronous Learning Networks*. 6 (1) pp. 76-90.

Vlachopoulos, P. & McAleese, R. (2004) 'E-Moderating in On-Line Problem Solving: a new role for teachers?' *Proceedings of the 4th Hellenic Conference with International Participation 'ICT in Education'*, Athens, Greece. pp. 399-406. http://www.epyna.gr/show/a399_406.pdf [accessed 28 May 2007]

Vlachopoulos, P. (2009) 'The Nature of E-Moderation in Online Learning Environments'. In: Comrie, A., Mayes, N., Mayes, T. & Smyth, K. (Eds) *Proceedings of the Learners in the Co-creation of Knowledge (LICK) 2008 Symposium*. Edinburgh: Edinburgh Napier University. pp. 48-57. ISBN: 978-0-902703-85-8.

Vlachopoulos, P. & Cowan, J. (2010a) 'Choices of approaches in e-moderation: Conclusions from a grounded theory study'. *Active Learning in Higher Education*. 11 (3) pp. 213–224.

Vlachopoulos, P. & Cowan, J. (2010b) 'Reconceptualising moderation in asynchronous online discussions using grounded theory'. *Distance Education*. 31 (1) pp. 23-36.

Vonderwell, S. (2003) 'An examination of asynchronous communication experiences and perspectives of students in an online course: a case study'. *The Internet and Higher Education*. 6 (1) pp. 77-90.

Vonderwell, S. & Zachariah, S. (2005) 'Factors that Influence Participation In Online Learning'. *Journal of Research on Technology in Education*. 38 (2) pp. 213-230.

Vygotsky, L.S. (1978) *Mind in society: the development of higher psychological processes*. Cambridge (Mass): Harvard University Press.

Walford, G. (2001) *Doing Qualitative Educational Research: A Personal Guide to the Research Process*. London: Continuum.

Walford, G. (2005) 'Research ethical guidelines and anonymity'. *International Journal of Research & Method in Education*. 28 (1) pp. 83-93.

- Wang, Q. (2008) 'Student-facilitators' roles in moderating online discussions'. *British Journal of Educational Technology*. 39 (5) pp. 859–874.
- Wang, Y.-M. & Chen, D.T. (2010) 'Promoting spontaneous facilitation in online discussions: designing object and ground rules'. *Educational Media International*. 47 (3) pp. 247–262.
- Weerasinghe, T.A., Ramberg, R. & Hewagamage, K.P. (2012a) 'Inquiry-based learning with or without facilitator interactions'. *Journal of Distance Education*. 26(2). <http://www.ijede.ca/index.php/jde/article/view/779/1406> [accessed 10 January 2013].
- Weerasinghe, T.A., Hewagamage, K.P. & Ramberg, R. (2012b) 'Re-evaluation of community of inquiry model with its metacognitive presence construct'. *International Journal on Advances in ICT for Emerging Regions (ICTer)*. 5 (4). <http://www.sljol.info/index.php/ICTER/article/view/6095> [accessed 10 January 2013].
- Wenger, E. (1998) *Communities of Practice*. Cambridge: Cambridge University Press.
- Wenger, E., McDermott, R.A. & Snyder, W. (2002) *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston, Mass.: Harvard Business School Press.
- Wengraf, T. (2001) *Qualitative Research Interviewing*. London: Sage Publications.
- Wiles, R., Charles, V., Crow, G. & Heath, S. (2006) 'Researching researchers: lessons for research ethics'. *Qualitative Research*. 6 (3) pp. 283-299.
- Williams, J.B., Evans, C. & Metcalf, D. (2010) 'Team Teaching: A Collaborative Approach to Effective Online Instruction'. *National Teacher Education Journal*. 3 (3) pp. 33-38.
- Williams, L. & Lahman, M. (2011) 'Online Discussion, Student Engagement, and Critical Thinking'. *Journal of Political Science Education*. 7 (2) pp.143–162.
- Willis, J.W. (2007) *Foundations of Qualitative Research: Interpretive and Critical Approaches*. London: Sage Publications.

- Xie, K., DeBacker, T. K. & Ferguson, C. (2006) 'Extending the traditional classroom through online discussion: The role of student motivation'. *Journal of Educational Computing Research*. 34 (1) pp. 67–89.
- Xin, C. & Feenberg, A. (2006) 'Pedagogy in Cyberspace: The Dynamics of Online Discourse'. *Journal of Distance Education*. 21 (2) pp. 1-25.
- Yeh, Y.-C. (2010) 'Analyzing Online Behaviors, Roles, and Learning Communities via Online Discussions'. *Educational Technology & Society*. 13 (1) pp. 140–151.
- Yin, R.K. (2003) *Applications of Case Study Research*. 2nd edition. London: Sage Publications.
- Yin, R.K. (2009) *Case Study Research: Design and Methods*. 4th edition. London: Sage Publications.
- Zembylas, M. & Vrasidas, C. (2007) 'Listening for Silence in Text-Based, Online Encounters'. *Distance Education*. 28 (1) pp. 5–24.
- Zhao, H., Sullivan, K.P.H. & Mellenius, I. (2014) 'Participation, interaction and social presence: An exploratory study of collaboration in online peer review groups'. *British Journal of Educational Technology*. 45 (5) pp.807–819.
- Ziegler, M., Paulus, T. & Woodside, M. (2006) 'Creating a climate of engagement in a blended learning environment'. *Journal of Interactive Learning Research*. 17 (3) pp. 295-318.
- Zimmerman, B.J. (2008) 'Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects'. *American Educational Research Journal*. 45, pp. 166–183.
- Zydney, J.M., deNoyelles, A. & Seo, K.K.-J. (2012) 'Creating a community of inquiry in online environments: An exploratory study on the effect of a protocol on interactions within asynchronous discussions'. *Computers & Education*. 58 (1) pp. 77–87.

APPENDIX I

OUTLINE QUESTIONS AND PROMPTS TO SCAFFOLD STUDENT INTERVIEWS

[Note that the pre-amble was used only for questionnaire-style self-administered interviews]

Hello. Here is my outline check-list of questions. I have been starting off with an open question, to allow participants to comment on any aspect of the course or the discussion boards, as pertinent to themselves and their own experience. - Hopefully this will ensure that I don't miss anything of individual importance. After this, I have been using more focused/directed questions, and have drawn on some of the subsidiary questions by way of prompts to expand.

But all of it is being dealt with in what I hope is a free-flowing discussion - so not too tightly structured. - I'm using my list to ensure that all of these areas are covered, but also I'm still free to pick up on any other issues that participants themselves might mention.

If you can jot down your responses to each question, that would be ever so helpful.

1	Tell me about the online discussion-board. (anything you like – just what springs to your mind....)
2	Was this your first experience of online learning?
3	Did you have clear expectations of what would be involved? (what you would be doing? What the tutors would do?)
4	Do you use other types of discussion boards or online 'fora'?
5	Can I ask you what you believe is the purpose of the online discussion activities?
6	How did you engage with the online discussion activities? a. Did you post frequent responses? b. Did you respond to certain individuals? Or on certain topics? c. Did you reply to fellow participants? (in what circumstances?) d. (& was that on the discussion board or privately by email?) e. Did you ever respond to a tutor posting? (tell me about it - what moved you to respond? – or not to respond? – and was that response usually by email, or on the discussion board, or both?)

	f. And on the whole do you prefer to post early or late?
7	Did you read any (or all?) of the previous postings prior to posting your response? a. Were you strategic in your reading? Was there anyone whose postings you would always read? (or never read?).
8	Were there any participants within your Learning Set with whom you developed a particular rapport? (or with whom you felt problems?).
9	Did you always use the discussion board to keep in touch with fellow participants and/or tutors? Or did you use 'reply privately'; and/or send Webct-mail or ordinary email as well? (what would prompt you to use a mail reply instead of discussion board?)
10	Did your Learning Set function as a group, or were you all working on your own, as individuals? (or did it fragment into one or more sub-groups?)
11	I'd like to explore your interactions with the various tutors - did you develop a rapport with them all? (and how well do you feel you know the tutors?) a. If there was anyone you had a specially good relationship with, can you describe what this has entailed? b. If there was anyone who you did not get on with, can you think about what impact this had on your engagement with the course/module?
12	How many different Tutors did you have in your Learning Set over the year?
13	What do you think should be the Tutor's role in the Discussion Board? a. And in an e-learning course overall? (- ie, anything else as well as Discussion-board?)
14	Were all the tutors the same, as regards the online discussion board, or did you notice any differences? a. If there were any differences, can you describe what these differences were? b. Did this impact on the group? Or on how discussion developed? (in what way?)
15	Were you confident that the Tutors were reading your postings? (or did they need to post a reply to convince you?). a. Was this the same for all tutors? (if not, what were the differences you noticed?)

16	<p>Were you confident that the Tutors were reading your postings? (or did they need to post a reply to convince you?).</p> <p>a. Was this the same for all tutors? (if not, what were the differences you noticed?)</p>
17	<p>How long do you think it was before your Tutor read your discussion board postings? (do you have any feel for this?)</p> <p>a. If this is different for different modules and/or different tutors, it would be helpful if you could explain your experience.</p>
18	<p>Did you take advantage of the option for receiving Formative Feedback on assignments? If so, what was your experience?</p>
19	<p>Did you use the Wimba voice discussion board? Please comment on your experience.</p>
20	<p>And finally - how well did you get to know everyone?</p> <p>a. both other participants & tutors – do you feel you know some or all of them by now? (some more than others?)</p> <p>Did you manage to attend faced-to-face sessions, and if so, were they useful? (in what way?).</p>
21	<p>Please share any further thoughts</p>

Thank you very much for taking the trouble to respond!!
Cathy

APPENDIX II

OUTLINE QUESTIONS AND PROMPTS TO SCAFFOLD TUTOR INTERVIEWS

1	tell me about the online discussion board (whatever you like).
2	How experienced would you say you are with using online discussion? (for how many years? And in how many different courses?)
3	What do you feel is the purpose of the online discussion board?
4	what is the function of the tutor, in the context of online discussion? (do you have particular any techniques for getting discussion going?) (Or for including people who have not yet responded?) (how do you ensure that everyone takes part?)
5	how frequently do you log in & read the discussion board? (do you read everything?) (what makes you decide whether or not to 'reply' to discussion postings?) (do you review a whole activity thread when you log in to read; or do you simply read new postings?) (do you usually reply to your tutees postings on the discussion board or by individual mail message? - what would make you choose discussion board or email for your response?)
6	What constitutes a 'good' discussion thread?
7	can I focus on the 2006 cohort? - how do you feel the discussion board functioned last year? how does this compare to other experiences you have on using online discussion? (clarify comparisons).

8	did you find it easy to move between groups? (why?)
9	<p>did you develop a rapport with certain groups or individuals?</p> <p>Or did you find any undue difficulty with certain groups or individuals?</p> <p>(how do you think this affected the online discussion?</p> <p>- for example, did it seem to inhibit postings? Or did your relationship with certain groups stimulate additional postings?)</p>
10	<p>was there any organisation within any of the groups you were responsible for? - for example, did you ask them to take on certain roles?</p> <p>(did the group spontaneously take on certain roles without your prompting?)</p>
11	We're at the end of my list now. Is there anything else you have thought of that you would like to mention?
12	THANK YOU!